SAMSUNG

BN68-01936D-00

SERIES
4

Plasma TV
user manual

imagine the possibilities

Thank you for purchasing this Samsung product.
To receive more complete service, please register
your product at

www.samsung.com/register

Model _____ Serial No. _____

SAMSUNG

User Instructions

■ **Screen Image retention**

Do not display a still image (such as on a video game or when hooking up a PC to this PDP) on the plasma monitor panel for more than 2 hours as it can cause screen image retention. This image retention is also known as "screen burn". To avoid such image retention, reduce the degree of brightness and contrast of the screen when displaying a still image.

■ **Height**

The PDP can normally operate only under 2000m in height. It might abnormally function at a place over 2000m in height so do not install and operate there.

■ **Heat on the top of the PDP TV**

The top side of the product may be hot after long period of use as heat dissipates from the panel through the vent hole in the upper part of the product. This is normal and does not indicate any defect or operation failure of the product. However, children should be prevented from touching the upper part of the product.

■ **The product is making a 'cracking' noise.**

A 'cracking' noise may occur when the product contracts or expands due to a change of surrounding environment such as temperature or humidity. This is normal and not a defect of the unit.

■ **Cell Defects**

The PDP uses a panel consisting of 2,360,000(HD-level) to 6,221,000(FHD-level) pixels which require sophisticated technology to produce. However, there may be few bright or dark pixels on the screen. These pixels will have no impact on the performance of the product.

■ **Avoid operating the TV at temperatures below 5°C(41°F)**

■ **A still image displayed too long may cause permanent damage to the PDP Panel.**

 Watching the PDP TV in 4:3 format for a long period of time may leave traces of borders displayed on the left, right and centre of the screen caused by the difference of light emission on the screen. Playing a DVD or a game console may cause similar effect to the screen. Damages caused by the above effect are not covered by the Warranty.

■ **Afterimage on the Screen.**

Displaying still images from Video games and PC for longer than a certain period of time may produce partial afterimages.
To prevent this effect, reduce the 'brightness' and 'contrast' when displaying still images.

■ **Warranty**

- Warranty does not cover any damage caused by image retention.
- Burn-in is not covered by the warranty.

■ **Installation**

Be sure to contact an authorized service centre, when installing your set in a location with heavy dust, high or low temperatures, high humidity, chemical substance and where it operates continually such as the airport, the train station etc. Failure to do so may cause a serious damage to your set.

Digital TV (DVB-T) Notice

1. Functionalities related to Digital TV(DVB) are only available in countries/areas where DVB-T (MPEG2 and MPEG4 AVC) digital terrestrial signals are broadcasted or where you have access to a compatible DVB-C(MPEG2 and MPEG4 AAC) cable-TV service. Please check with your local dealer the possibility to receive DVB-T or DVB-C signal.

2. DVB-T is the DVB European consortium standard for the broadcast transmission of digital terrestrial television and DVB-C is that for the broadcast transmission of digital TV over cable.
   However, some differentiated features like EPG (Electric Program Guide), VOD (Video on Demand) and so on, are not included in this specification. So, they cannot be supported at this moment.

3. Although this TV set meets the latest DVB-T and DVB-C standards[August,2008], the compatibility with future DVB-T digital terrestrial and DVB-C digital cable broadcasts cannot be guaranteed.

4. Some cable-TV providers may charge an additional fee for such a service and you may be required to agree to terms and conditions of their business.

5. Some Digital TV functions might be unavailable in some countries or regions and DVB-C might not work correctly with all providers.

6. For more information, please contact your local Samsung customer care centre.

Contact SAMSUNG WORLDWIDE

If you have any questions or comments relating to Samsung products, please contact the SAMSUNG customer care centre. (See back cover for more informations.)

Contents

Symbol	Press	Note	One-Touch Button	TOOLS

Connecting and Preparing Your TV

Checking Parts

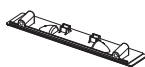Owner's Instructions

Remote Control/
AAA Batteries (2ea)

Power Cord

Cloth-Clean

Screw (4ea)

Cover-Bottom

Holder-Ring (4ea)
(Refer to page 35)

Ferrite Core for Power Cord
(1ea)

✎ The ferrite core is used to shield the cable from interference. When connecting a cable, open the ferrite core and clip it around the cable near the plug.

Using the Stand-Base

✎ Two or more people should carry the PDP. Never lay the PDP on the floor because of possible damage to the screen. Always keep the PDP upright.

✎ The PDP can rotate 20 degrees in right and left directions.

-20° ~ 20°
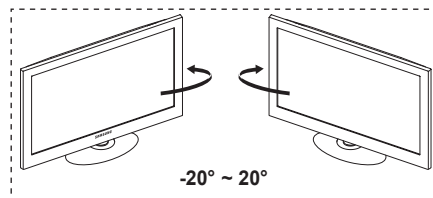
How to assemble the Stand-Base (depending on the model)

Using the 4 screws for securing the stand base and the monitor, firmly attach the monitor to the stand base.
(The exterior of the set may be different than the picture.)
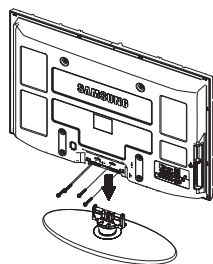
Warning

Firmly secure the stand to the TV before moving it, as the stand may fall and could cause serious injury.

✎ Two or more people should carry the TV. Never lay the TV on the floor because of possible damage to the screen. Always store the TV upright.

In case of installing your TV on the wall, close the cover (❶) on the stand-base connection part using two screws for hiding.
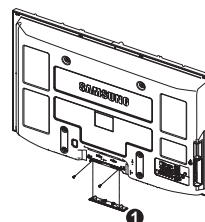
Viewing the Control Panel
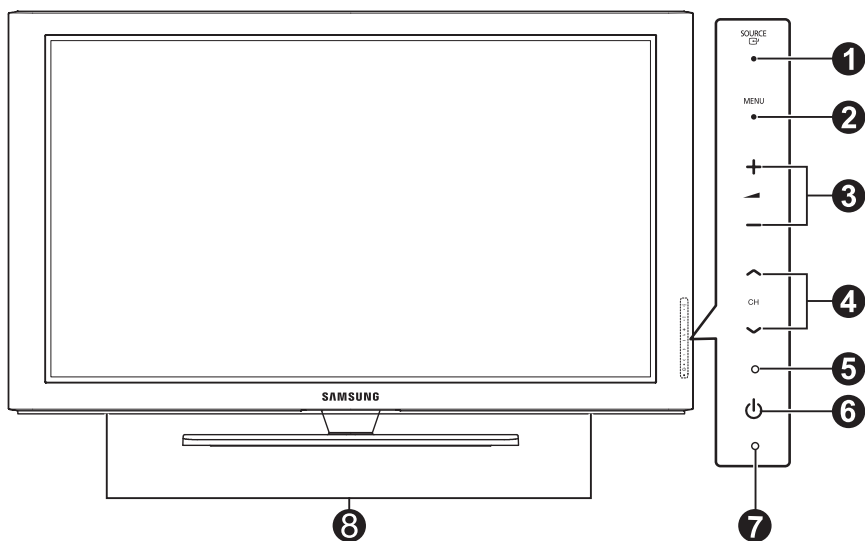
❶ SOURCE ⬚
Toggles between all the available input sources
(**TV, Ext. AV, PC, Component, HDMI1, HDMI2/DVI, HDMI3**).

  ✎ In the on-screen menu, use this button as you would use
 the **ENTER**⬚ button on the remote control.

❷ MENU
Press to see an on-screen menu of your TV's features.

❸ + ◢ –
Press to increase or decrease the volume. In the on-screen
menu, use the + ◢ – buttons as you would use the
◄ and ► buttons on the remote control.

❹ ⋀ CH ⋁
Press to change channels. In the on-screen menu, use the
⋀ CH ⋁ buttons as you would use the ▲ and ▼ buttons
on the remote control.

❺ POWER INDICATOR
Lights up when the power is on.

❻ ⏻ (**POWER**)
Press to turn the TV on and off.

❼ REMOTE CONTROL SENSOR
Aim the remote control towards this spot on the TV.

❽ SPEAKERS

Viewing the Connection Panel

🖉 The product colour and shape may vary depending on the model.

🖉 Whenever you connect an audio or video system to your set, ensure that all elements are switched off.

🖉 When connecting an external device, match the colour of the connection terminal to the cable.

❶ SERVICE1, 2
Connector for service.

❷ POWER IN
Connect the supplied power cord.

❸ COMPONENT IN
Audio (AUDIO L/R) and video (Y / P_B / P_R) inputs for Component.

❹ PC IN(PC) / (AUDIO)
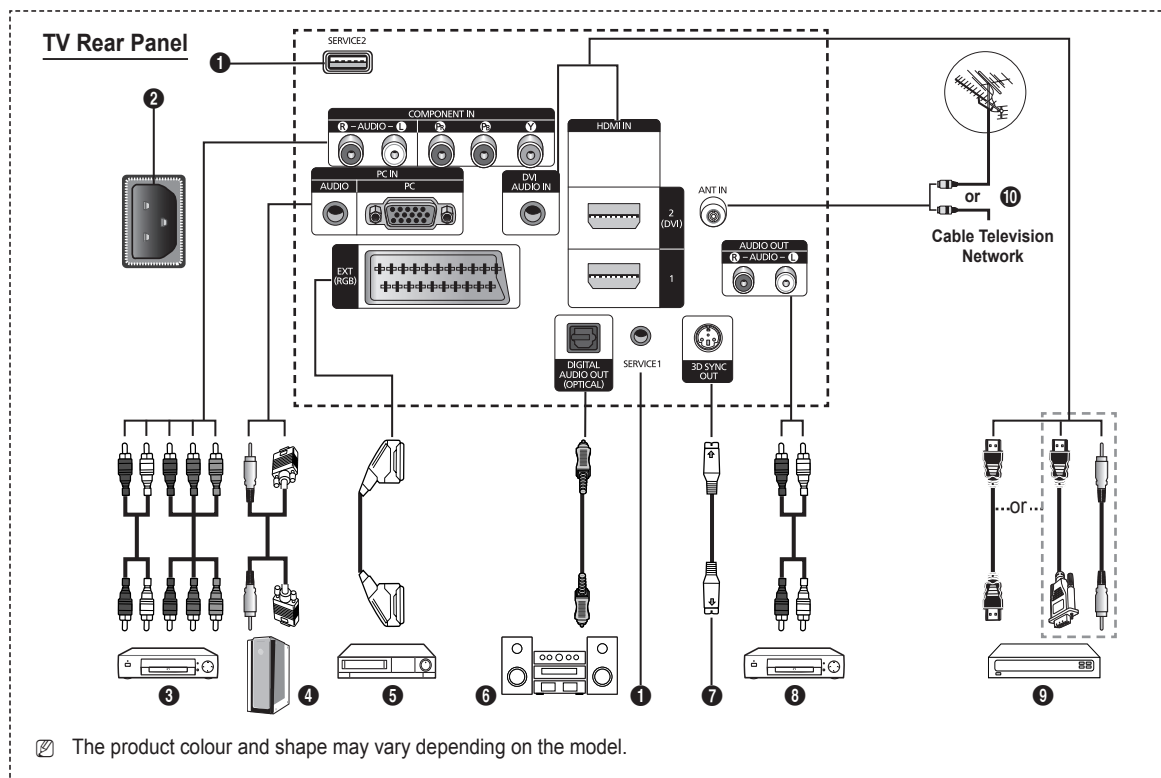Connect to the video and audio output jack on your PC.

❺ EXT (RGB)
Inputs or outputs for external devices, such as VCR, DVD, video game device or video disc players.

Input/Output Specification

Connector	Input			Output
	Video	Audio(L/R)	RGB	Video + Audio(L/R)
EXT	✔	✔	✔	Only TV or DTV output is available.

❻ DIGITAL AUDIO OUT (OPTICAL)
Connect to a Digital Audio Component.

❼ 3D SYNC OUT
Connect to 3D IR Emitter.

❽ AUDIO OUT(AUDIO R/L)
Connect RCA audio signals from the TV to an external source, such as Audio equipment.

❾ HDMI IN 1, 2(DVI)
No additional Audio connection is needed for an HDMI to HDMI connection.

- When using an HDMI/DVI cable connection, you must use the HDMI IN 2 (DVI) jack.

🖉 What is HDMI?
   - **High Definition Multimedia interface** allows the transmission of high definition digital video data and multiple channels of digital audio.
   - The HDMI/DVI terminal supports DVI connection to an extended device with the appropriate cable (not supplied). The difference between HDMI and DVI is that the HDMI device is smaller in size, has the HDCP (High Bandwidth Digital Copy Protection) coding feature installed, and supports multi - channel digital audio.

DVI AUDIO IN
DVI audio outputs for external devices.

❿ ANT IN
75Ω Coaxial connector for Aerial/Cable Network.

Supported modes for HDMI/DVI and Component

	480i	480p	576i	576p	720p	1080i	1080p
HDMI/DVI 50Hz	X	X	X	O	O	O	O
HDMI/DVI 60Hz	X	O	X	X	O	O	O
Component	O	O	O	O	O	O	O

TV Side Panel
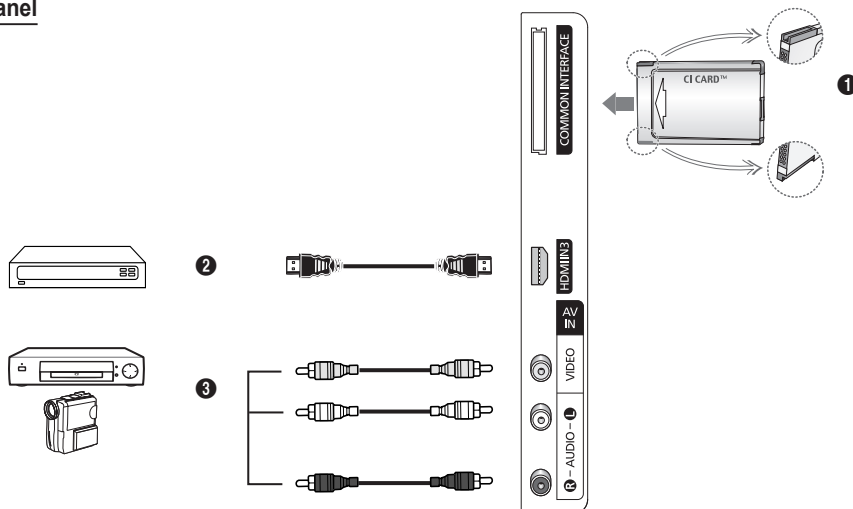
➊

HDMI IN3

AV IN

VIDEO

AUDIO – L

AUDIO – R

➋

➌

✎ The product colour and shape may vary depending on the model.

➊ **COMMON INTERFACE Slot**
Insert CI (Common Interface) card into the slot.
(refer to page 26)
- When not inserting **CI CARD** in some channels,
  Scramble Signal is displayed on the screen.
- The pairing information containing a telephone number,
  CI CARD ID, Host ID, and other information will be
  displayed in about 2~3 minutes. If an error message is
  displayed, please contact your service provider.
- When the channel information configuration has finished,
  the message **Updating Completed** is displayed,
  indicating that the channel list is now updated.

✎ Insert the CI-Card in the direction marked on it.

✎ CAM is not supported in some countries and
  regions,check with your authorized dealer.

➋ **HDMI IN 3**
Connect to the HDMI jack of a device with HDMI output.

➌ **AV IN (VIDEO, AUDIO L/R)**
Video and audio inputs for external devices, such as a
camcorder or VCR.

Remote Control

You can use the remote control up to a distance of about 23 feet from the TV.

▨ The performance of the remote control may be affected by bright light.

❶ POWER button
(turns the TV on and off)

❷ Selects the TV mode directly.

❸ Number buttons for direct channel access

❹ Use to select on-screen menu items

❺ Temporary sound switch-off

❻ [+] Volume increase
[−] Volume decrease

❼ Available source selection

❽ Used to display Channel Lists on the screen

❾ Use to quickly select frequently used functions.

❿ Control the cursor in the menu

⓫ Use to see information on the current broadcast

⓬ Use these buttons in the Channel list, etc.

⓮ Sound mode selection

⓯ Use these buttons in the Channel list, and Anynet+.

⓰ Previous channel

⓱ [∧] Next channel
[∨] Previous channel

⓲ Displays the main on-screen menu

⓳ Displays the favourites channel list.

⓴ Returns to the previous menu

㉑ Exit the on-screen menu

㉒ Selects SRS TruSurround HD mode.

㉓ Picture size selection

㉔ Digital subtitle display

㉕ Electronic Program Guide (EPG) display

Teletext Functions

❷ Exit from the teletext display (depending on the model)

❼ Teletext mode selection (LIST/FLOF)

❽ Teletext store

❾ Teletext size

⓫ Teletext reveal

⓬ Fastext topic selection

⓭ Teletext display/mix both teletext information and the normal broadcast

⓰ Teletext sub page

⓱ P [∧] :Teletext next page
P [∨] :Teletext previous page

⓲ Teletext index

⓴ Teletext hold

㉑ Teletext cancel
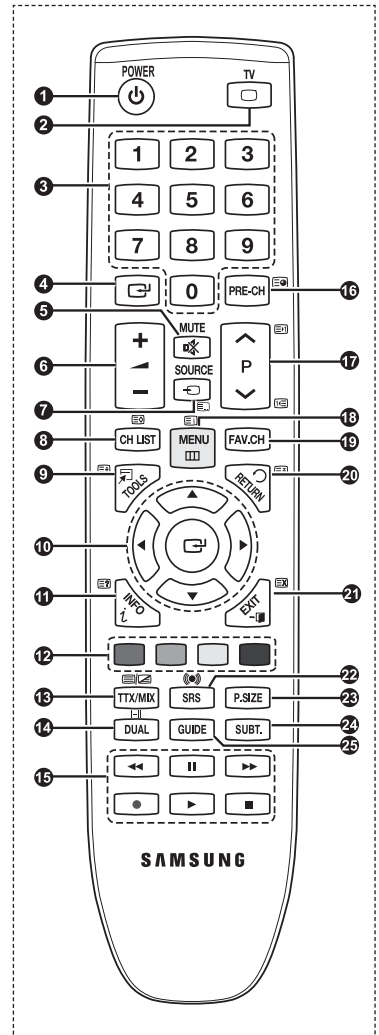
Installing Batteries in the Remote Control

1. Lift the cover at the back of the remote control upward as shown in the figure.
2. Install two AAA size batteries.
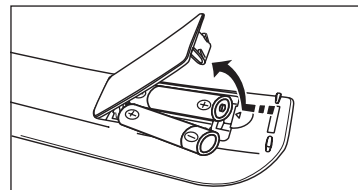   - ✎ Make sure to match the '+' and '–' ends of the batteries with the diagram inside the compartment.
3. Close the cover.
   - ✎ Remove the batteries and store them in a cool, dry place if you won't be using the remote control for a long time.

- ✎ If the remote control doesn't work, check the following
  1. Is the TV power on?
  2. Are the plus and minus ends of the batteries reversed?
  3. Are the batteries drained?
  4. Is there a power outage or is the power cord unplugged?
  5. Is there a special fluorescent light or neon sign nearby?

Switching On and Off

The mains lead is attached to the rear of your set.

1. Plug the mains lead into an appropriate socket.
   - ✎ The standby indicator lights up on your set.
2. Press the **POWER**⏻ button on your set.
   - ✎ You also can press the **POWER**⏻ button or the **TV** button on the remote control to turn the TV on. The programme that you were watching last is reselected automatically.
3. Press the numeric button (0~9) or channel up / down (∧ / ∨) button on the remote control or ∧ **CH** ∨ button on your set.
   - ✎ When you switch the set on for the very first time, you will be asked to choose language in which the menus are to be displayed.
4. To switch your set off, press the **POWER**⏻ button again.

Placing Your Television in Standby Mode

Your set can be placed in standby mode in order to reduce the power consumption. The standby mode can be useful when you wish to interrupt viewing temporarily (during a meal, for example).

1. Press the **POWER**⏻ button on the remote control.
   - ✎ The screen is turned off and a red standby indicator appears on your set.
2. To switch your set back on, simply press the **POWER**⏻, numeric buttons (0~9), **TV** button or channel up / down (∧ / ∨) button again.
   - ✎ Do not leave your set in standby mode for long periods of time (when you are away on holiday, for example). It is best to unplug the set from the mains and aerial.

Viewing the Menus

1. With the power on, press the **MENU** button. The main menu appears on the screen. The menu's left side has icons: **Picture, Sound, Channel, Setup, Input, Application, Support**.

2. Press the ▲ or ▼ button to select one of the icons. Then press the **ENTER** button to access the icon's sub-menu.

3. Press the **EXIT** button to exit.

   ✎ The on-screen menus disappear from the screen after about one minute.

Picture		
■	Mode	: Standard
◐	Cell Light	: 4
🖐	Contrast	: 95
🌡	Brightness	: 45
🔌	Sharpness	: 50
📺	Colour	: 50
	Tint (G/R)	: G50/R50
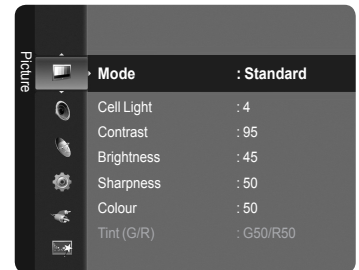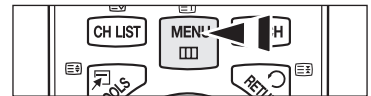
Using the TOOLS Button

You can use the **TOOLS** button to select your frequently used functions quickly and easily. The **Tools** menu changes depending on which external input mode you are viewing.

1. Press the **TOOLS** button. The **Tools** menu will appear.

2. Press the ▲ or ▼ button to select a menu, then press the **ENTER** button.

3. Press the ▲ / ▼ / ◄ / ► / **ENTER** buttons to display, change, or use the selected items. For a more detailed description of each function, refer to the corresponding page.

   - Anynet⁺ (HDMI-CEC), see page 30
   - Picture Mode, see page 17
   - Sound Mode, see page 23
   - Sleep Timer, see page 27
   - Energy Saving, see page 26
   - Add to Favourite (or Delete from Favourite), see page 15
   - Auto Adjustment, see page 21

Tools		
Anynet+ (HDMI-CEC)		
Picture Mode	:	Standard
Sound Mode	:	Custom
Sleep Timer	:	Off
Energy Saving	:	Off
Add to Favourite		
◆ Move	⏎ Enter	→◼ Exit
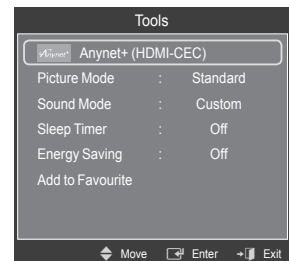
Plug & Play Feature

When the TV is initially powered on, basic settings proceed automatically and subsequently.

- ✎ The Screen Saver is activated if there is no remote control key input for longer than 1 minute while Plug & Play is running.
- ✎ The Screen Saver is activated if there is no operating signal for longer than 15 minutes.

1. Press the **POWER** button on the remote control. **You can set the menu language.** menu is automatically displayed. Select the appropriate language by pressing the ▲ or ▼ button.
   Press the **ENTER**⏎ button to confirm your choice.

2. Press the ◄ or ► button to select **Store Demo** or **Home Use**, then the **ENTER**⏎ button.

   - ✎ We recommend setting the TV to **Home Use** mode for the best picture in your home environment.
   - ✎ **Store Demo** mode is only intended for use in retail environments.
   - ✎ If the unit is accidentally set to **Store Demo** mode and you want to return to **Home Use** (Standard): Press the Volume button on the TV. When the volume OSD is displayed, press and hold the **MENU** button on the TV for 5 seconds.

3. Press the **ENTER**⏎button. Select the appropriate country by pressing the ▲ or ▼ button. Press the **ENTER**⏎ button to confirm your choice.

4. Press the ▲ or ▼ button to memorize the channels of the selected connection, then press the **ENTER**⏎ button.

   - **Air:** Air antenna signal.
   - **Cable:** Cable antenna signal.

5. Press the ▲ or ▼ button to select the channel source to memorize. Press the **ENTER**⏎ button to select **Start**.

   - **Digital & Analogue**: Digital and Analogue channels.
   - **Digital**: Digital channels.
   - **Analogue**: Analogue channels.
   - ✎ For more detailed description of selecting Cable mode,, refer to page 12.
   - ✎ The channel search will start and end automatically.
   - ✎ Press the **ENTER**⏎ button at any time to interrupt the memorization process.
   - ✎ After all the available channels are stored, the message **Set the Clock Mode.** is displayed.

6. Press the **ENTER**⏎ button. Press the ▲ or ▼ button to select **Auto**, then Press the **ENTER**⏎ button.

   - ✎ If you select **Manual**, **Set current date and time** is displayed. (refer to page 27)
   - ✎ If you have received a digital signal, the time will be set automatically. If not, see page 27 to set the clock.

7. The brief instruction on **How to get the best performance from your new HDTV**. is displayed. Press the **ENTER**⏎ button.

   - ✎ This menu is available **HD Connection Guide** in the **Support** menu.

8. The message **Enjoy your TV** is displayed. When you have finished, press the **ENTER**⏎ button.

If you want to reset this feature...

1. Press the **MENU** button to display the menu. Press the ▲ or ▼ button to select **Setup**, then press the **ENTER**⏎ button.

2. Press the **ENTER**⏎ button again to select **Plug & Play**.

3. Enter your 4 digit PIN number. The default PIN number of a new TV set is '0-0-0-0'.

- ✎ If you want to change PIN number, refer to 25 page.
- ✎ The **Plug & Play** feature is only available in the **TV** mode.
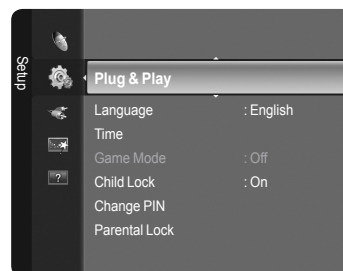
Channel Control

Storing Channels

❑ Country

■ **Digital Channel**: You can change the country for digital channels.

■ **Analogue Channel**: You can change the country for analogue channels.

✐ The PIN number input screen appears. Enter your 4 digit PIN number.

❑ Auto Store

Scans for all channels with active broadcast stations (and availability depends on your country) and stores them in the TV's memory.
You can memorize the channels of the selected connection.

- **Air**: Air antenna signal.
- **Cable**: Cable antenna signal.

✐ When selecting Cable,

- **Search Mode**: Displays the search mode. (**Quick**)
  - **Network ID**: Displays the network identification code.
  - **Frequency**: Displays the frequency for the channel.
  - **Modulation**: Displays available modulation values.
  - **Symbol Rate**: Displays available symbol rates.
- **Search Mode**: Displays the search mode. (**Full**, **Network**)
  - **Frequency (Start~Stop)**: Displays the frequency for the channel.
  - **Modulation**: Displays available modulation values.
  - **Symbol Rate**: Displays available symbol rates.

You can memorize the Channel source

- **Digital & Analogue**: Digital and Analogue channels.
- **Digital**: Digital channels.
- **Analogue**: Analogue channels.

✐ If you want to stop **Auto Store**, press the **ENTER**⏎ button.

✐ The **Stop Auto Store?** message will be displayed.

✐ Select **Yes** by pressing the ◄ or ► button, then press the **ENTER**⏎ button.

✐ If a channel is locked using the **Child Lock** function, the PIN input window appears.

Channel	
	Country ►
	Auto Store
	Manual Store
	Cable Search Option
	Now & Next Guide
	Full Guide
	Default Guide : Now/Next
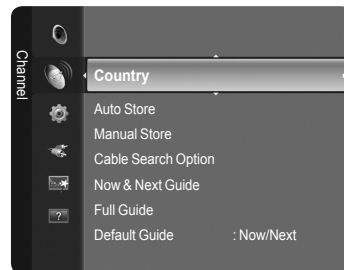
❏ **Manual Store**

Scans for a channel manually and stores it in the TV's memory.

■ **Digital Channel (Digital)**

Manual store for digital channels.

  ✍ Digital Channel is only available in DTV mode.
  • **Channel**: Set the Channel number using the ▲, ▼ or number (**0~9**) buttons.
  • **Frequency**: Set the frequency using the number buttons.
  • **Bandwidth**: Set the bandwidth using the ▲, ▼ or number (**0~9**) buttons.
  ✍ When it has finished, channels are updated in the channel list.

■ **Analogue Channel**

Manual store for analogue channel.

  • **Programme** (Programme number to be assigned to a channel): Sets the programme number using the ▲, ▼ or number (0~9) buttons.
  • **Colour System → Auto / PAL / SECAM / NTSC4.43**: Sets the colour system value using the ▲ or ▼ button.
  • **Sound System → BG / L / I / DK**: Sets the sound system value using the ▲ or ▼ button.
  • **Channel** (When you know the number of the channel to be stored): Press the ▲ or ▼ button to select **C** (Air channel) or **S** (Cable channel). Press the ► button, then press the ▲, ▼ or number (**0~9**) buttons to select the required number.
    ✍ You can also select the channel number directly by pressing the number (**0~9**) buttons.
    ✍ If there is abnormal sound or no sound, reselect the sound standard required.
  • **Search** (When you do not know the channel numbers): Press the ▲ or ▼ button to start the search. The tuner scans the frequency range until the first channel or the channel that you selected is received on the screen.
  • **Store** (When you store the channel and associated programme number): Set to **OK** by pressing the **ENTER**⏎ button.
  ✍ Channel mode
    - **C** (Air channel mode): You can select a channel by entering the assigned number to each air broadcasting station in this mode.
    - **S** (Cable channel mode): You can select a channel by entering the assigned number for each cable channel in this mode.

❏ **Cable Search Options (Cable)**

You can add directly the channel search range in the network search mode. (Dependingon the each country)

  • **Frequency (Start~Stop)**: Displays the frequency for the channel.
  • **Modulation**: Displays available modulation values.
  • **Symbol Rate**: Displays available symbol rates.
  ✍ Set the **Frequency (Start~Stop)** and **Symbol Rate** using the number (**0~9**) buttons.

❏ **Now & Next Guide / Full Guide**

The EPG (Electronic Programme Guide) information is provided by the broadcasters. Programme entries may appear blank or out of date as a result of the information broadcast on a given channel. The display will dynamically update as soon as new information becomes available.

■ **Now & Next Guide**: For the six channels indicated in the left-hand column, displays the Current programme and the Next programme information.

■ **Full Guide**: Displays the programme information as time ordered One hour segments. One hours of programme information is displayed which may be scrolled forwards or backwards in time.

❏ Default Guide

■ **Now/Next / Full Guide**: You can decide whether to display either the **Now/Next** or the **Full Guide** when the **GUIDE** button on the remote control is pressed.
   ⑤ You can also display the guide menu simply by pressing the **GUIDE** button.

○	Now & Next Guide
	Full Guide
●	**Default Guide** : Now/Next ▶
⚙	Channel List
✦	Channel Mode : Added Ch.
▨	Fine Tune
?	

TV/MIX   SRS   P.SIZE
DUAL   GUIDE   SUBT.
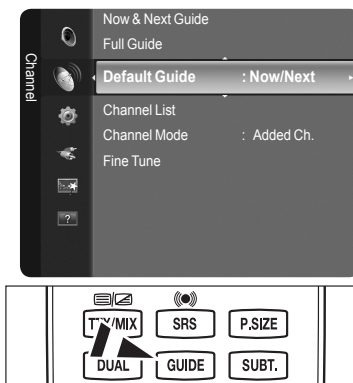
Using the Now & Next Guide / Full Guide

Now & Next Guide

DTV Cable 900 f tn   2:10 Tue 1 Jun
Freshmen On Campus
2:00 - 2:30
No Detailed Information

		Now	Next
900	f tn	Freshmen O.. Street Hypn..	No Information
901	ITV Play	Mint Extra	
902	Kerrang!	Loaded	No Information
903	Kiss	Fresh 40 with Dynamite MC	Kisstory
903	oneword	The Distillery	No Information
▼ 903	Smash Hits!	Smash Hits! Sunday	

↵Watch INFO Information ■ Full Guide ■ Exit

Full Guide

DTV Cable 900 f tn   2:10 Tue 1 Jun
Freshmen On Campus
2:00 - 2:30
No Detailed Information

		Today	2:00 - 3:00	3:00 - 4:00
900	f tn	Freshmen O.. Street Hypn..	No Information	
901	ITV Play	Mint Extra		
902	Kerrang!	Loaded	No Information	
903	Kiss	Fresh 40 with Dynamite MC	Kisstory	
903	oneword	The Distillery	No Information	
▼ 903	Smash Hits!	Smash Hits! Sunday		

↵Watch INFO Information ■ Now/Next ■ +24 Hours ■ Exit

▲ / ▼ / ◄ / ►, ↵ (**ENTER**)	Select a programme by pressing the ▲/▼/◄/► button. If the next progrmme is selected, it is scheduled with the clock icon displayed. If the **ENTER**↵ button is pressed again, press the ▲/▼/◄/► button to select **Cancel Schedules**, the scheduling is canceled with the clock icon gone. For details about scheduling programmes, refer to the section.
RED	Toggle between the **Now/Next** or **Full Guide**.
GREEN	**Full Guide**: Scroll backwards quickly (-24 hours).
YELLOW	**Full Guide**: Scroll forwards quickly (+24 hours).
BLUE	Exit the guide.
INFO	**INFO** button for the detailed information. Channel Number, Running Time, Status Bar, Parental Level, Video Quality Information (HD/SD), Sound Modes, Subtitle or Teletext, languages of Subtitle or Teletext and brief summary of the highlighted programme are included on the detailed information. "…" will be appeared if the summary is long.

❏ Channel List

For the detailed procedures on using the **Channel List**, refer to the descriptions on pages 15~16.

❏ Channel Mode

When the press the P ∧/∨ button, Channels will be switched within the selected channel list.

■ **Added Ch.**: Channels will be switched within the memorized channel list.
■ **Favourite Ch.**: Channels will be switched within the favourite channel list.

❏ Fine Tune (only analogue channels)

If the reception is clear, you do not have to fine tune the channel, as this is done automatically during the search and store operation. If the signal is weak or distorted, you may have to fine tune the channel manually.

✐ Fine tuned channels that have been saved are marked with an asterisk ***** on the right-hand side of the channel number in the channel banner.
✐ If you do not store the fine-tuned channel in memory, adjustments are not saved.
✐ To reset the fine-tuning, select **Reset** by pressing the **▼** button and then press the **ENTER**↵ button.

Managing Channels

Using this menu, you can Add / Delete or set Favourite channels and use the programme guide for digital broadcasts.

Ⓝ Select a channel in the **All Channels**, **Added Channels**, **Favourites,** or **Programmed** screen by pressing the ▲ / ▼ buttons, and pressing the **ENTER**⏎ button.
Then you can watch the selected channel.

■ **All Channels**: Shows all currently available channels.

■ **Added Channels**: Shows all added channels.

■ **Favourites**: Shows all favourite channels.

■ **Programmed**: Shows all current reserved programmes.

Ⓝ **Using the Colour buttons with the Channel List**
- **Red (**Channel Type**):** Toggle between your **TV**, **Radio**, **Data/Other** and **All**.
- **Green (**Zoom**):** Enlarges or shrinks a channel number.
- **Yellow (**Select**):** Selects multiple channel lists.
- ⏻**TOOLS (**Tools**):** Displays the **Delete** (or **Add**), **Add to Favourite** (or **Delete from Favourite**), **Timer Viewing**, **Edit Channel Name**, **Edit Channel Number**, **Sort**, **Lock** (or **Unlock**), **Select All** (or **Deselect All**)**,** or **Auto Store** menu.
(The Options menus may differ depending on the situation.)
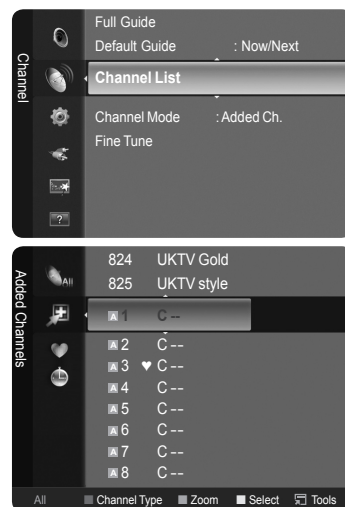
Ⓝ **Channel Status Display Icons**

Ⓐ	An Analogue channel.	✓	A channel selected by pressing the yellow button.
♥	A channel set as a Favourite.	⏱	A programme currently being broadcast.
🔒	A locked channel.	⏲	A reserved programme

⬚ Press the **CH LIST** button on the remote control to bring up the channel lists.

❏ **Channel List Tools Menu (in All Channels / Added Channels / Favourites)**

Ⓝ Press the **TOOLS** button to use the Tools menu.

Ⓝ Option menu items may differ depending on the channel status.

■ **Add / Delete**
You can delete or add a channel to display the channels you want.
Ⓝ All deleted channels will be shown on **All Channels** menu.
Ⓝ A gray-coloured channel indicates the channel has been deleted.
Ⓝ The **Add** menu only appears for deleted channels.
Ⓝ You can also delete a channel to the **Added Channels** or **Favourite** menu in the same manner.
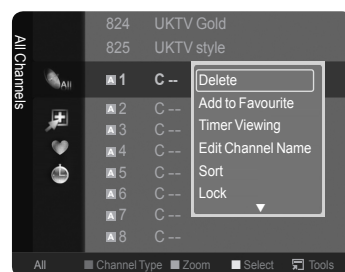
■ **Add to Favourite / Delete from Favourite**
You can set channels you watch frequently as favourites.

⏻ Press the **TOOLS** button to display **Tools** menu.
You can also add the favourite channel by selecting **Tools → Add to Favourite** (or **Delete from Favourite**).

Ⓝ The "♥" symbol will be displayed and the channel will be set as a favourite.

Ⓝ All favourite channels will be shown on **Favourite** menu.

⬚ To select the Favourite channels you have set up, press the **FAV.CH** button on the remote control.

■ **Timer Viewing**
If you reserve a programme you want to watch, the channel is automatically switched to the reserved channel in the Channel List; even when you are watching another channel. To reserve a programme set the current time first. (See page 27)

Ⓝ Only memorized channels can be reserved.

Ⓝ You can set the channel, month, day, year, hour and minute directly by pressing the number buttons on the remote control.

Ⓝ Reserving a programme will be shown on **Programmed** menu.

Ⓝ **Digital Programme Guide and Viewing Reservation**
When a digital channel is selected, and you press the ► button, the Programme Guide for the channel appears.
You can reserve a programme according to the procedures described above.

■ **Edit Channel Name** (only analogue channel)
Channels can labeled so that their call letters appear whenever the channel is selected.

   ✐ The names of digital broadcasting channels are automatically assigned and cannot be labeled.

■ **Edit Channel Number** (only digital channel)
You can also edit the channel number by pressing the number buttons on the remote control.

■ **Sort** (only analogue channel)
This operation allows you to change the programme numbers of the stored channels. This operation may be necessary after using the auto store.

■ **Lock / Unlock**

You can lock a channel so that the channel cannot be selected and viewed. This function is available only when the **Child Lock** is set to **on**. (see page 25)

   ✐ The PIN number input screen appears. Enter your 4 digit PIN number.

   ✐ The default PIN number of a new TV set is '0-0-0-0'**.** You can change the PIN, by selecting **Change PIN** from the menu.

   ✐ The "🔒" symbol will be displayed and the channel will be locked.

■ **Select All / Deselect All**

   • **Select All**: You can select all the channels in the channel list.

   • **Deselect Al**l: You can deselect all the selected channels in the channel list.

   ✐ You can perform the add / delete, add to Favourites / delete from Favourites, or lock / unlock function for multiple channels at the same time. Select the required channels and press the yellow button to set all the selected channels at the same time.

   ✐ The ✓ mark appears to the left of the selected channels.

   ✐ You can only select **Deselect All** when there is a selected channel.

■ **Auto Store**

   ✐ For further details on setting up options, refer to page 12.

   ✐ If a channel is locked using the **Child Lock** function, the PIN input window appears.

❑ **Channel List Option Menu (in Programmed)**

You can view, modify or delete a reservation.

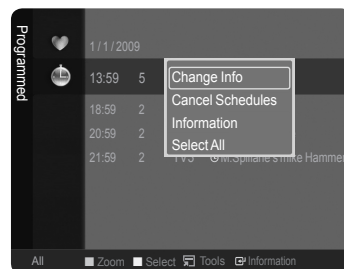   ✐ Press the **TOOLS** button to use the option menu.

   • **Change Info**: Select to change a viewing reservation.

   • **Cancel Schedules**: Select to cancel a viewing reservation.

   • **Information**: Select to view a viewing reservation.
     (You can also change the reservation information.)

   • **Select All**: Select all reserved programmes.

Picture Control
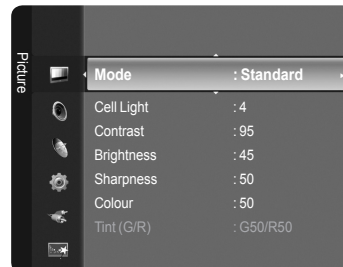
Changing the Picture Settings

❑ **Mode**

You can select the type of picture which best corresponds to your viewing requirements.

- **Dynamic**: Selects a high-definition picture for bright environments.
- **Standard**: Selects the optimal picture display for normal environments.
- **Movie**: Selects a comfortable picture display for dark environments.

⌱ Press the **TOOLS** button to display **Tools** menu.
You can also set the picture mode by selecting **Tools → Picture Mode**.

Picture			
	Mode	**: Standard**	►
	Cell Light	: 4	
	Contrast	: 95	
	Brightness	: 45	
	Sharpness	: 50	
	Colour	: 50	
	Tint (G/R)	: G50/R50	

❑ **Cell Light / Contrast / Brightness / Sharpness / Colour / Tint (G/R)**

Your television has several setting options that allow you to control the picture quality.

- **Cell Light**: Adjusts the pixel brightness.
- **Contrast**: Adjusts the contrast level.
- **Brightness**: Adjusts the brightness level.
- **Sharpness**: Adjusts the sharpness.
- **Colour**: Adjusts the colour saturation of the picture using the bar on the screen.
- **Tint (G/R)**: The closer to Red 100, the more saturated the red colour becomes.
- ⌱ Select a picture mode to be adjusted first. The adjusted values are saved for each picture mode.
- ⌱ When you make changes to **Cell Light**, **Contrast**, **Brightness**, **Sharpness**, **Colour** or **Tint (G/R)**, the OSD will be adjusted accordingly.
- ⌱ In Analogue TV, Ext., AV modes of the PAL system, you cannot use the Tint Function.
- ⌱ In **PC** mode, you can only make changes to **Cell Light**, **Contrast** and **Brightness**.
- ⌱ Settings can be adjusted and stored for each external device you have connected to an input of the TV.
- ⌱ The energy consumed during use can be significantly reduced if the level of brightness of the picture is reduced, and then this will reduce the overall running cost.

❑ **Advanced Settings**

Samsung's new TVs allow you to make even more precise picture settings than previous models. See below to adjust detailed picture settings.

- ⌱ **Advanced Settings** is available in **Standard** or **Movie** mode.
- ⌱ In PC mode, you can only make changes to **Gamma** and **White Balance** from among the **Advanced Settings** items.

Picture		
	Colour	: 50
	Tint (G/R)	: G50/R50
	Advanced Settings	►
	Picture Options	
	Picture Reset	
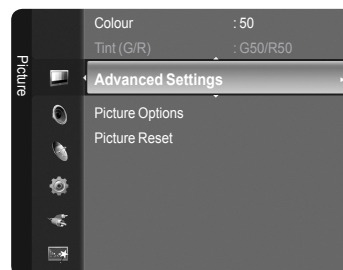
◼ **Black Tone → Off / Dark / Darker / Darkest**
You can select the black level on the screen to adjust the screen depth.

◼ **Dynamic Contrast → Off / Low / Medium / High**
You can adjust the screen contrast so that the optimal contrast is provided.

◼ **Gamma**
You can adjust the primary colour (Red, Green, Blue) Intensity.

◼ **Colour Space**
Colour Space is a colour matrix composed of red, green and blue colours. Select your favourite Colour Space to experience the most natural colour.

- **Auto**: Automatically sets the colour range depending on the input video source.
- **Native**: Sets a colour range wider than that of the input video source.

◼ **White Balance**
You can adjust the colour temperature for more natural picture colours.

- **R-Offset / G-Offset / B-Offset / R-Gain / G-Gain / B-Gain**: Changing the adjustment value will refresh the adjusted screen.
- **Reset**: Resets the default white balance.

◼ **Flesh Tone**
You can emphasize the pink flesh tone in the picture.

- ⌱ Changing the adjustment value will refresh the adjusted screen.

◼ **Edge Enhancement → Off / On**
You can emphasize object boundaries in the picture.

❏ Picture Options

    ✎ In **PC** mode, you can only make changes to the **Colour Tone, Size** and **Screen Burn Protection** from among the items in **Picture Options**.

■ **Colour Tone → Cool / Normal / Warm1 / Warm2**
You can select the most comfortable colour tone to your eyes.

    ✎ The adjusted values are stored according to the selected **Picture** mode.

    ✎ **Warm1** or **Warm2** is only activated when the picture mode is **Movie**.

Tint (G/R)	: G50/R50
Advanced Settings	
Picture Options	▶
Picture Reset	

■ **Size**
You can select the picture size which best corresponds to your viewing requirements.

    • **Auto Wide**: Sets the picture in Auto Wide format.
    • **16:9**: Sets the picture to the 16:9 aspect ratio.
    • **Wide Zoom**: Select this menu to view 4:3 aspect ratio pictures over a 16:9 aspect ratio TV by stretching the 4:3 picture vertically.
    • **Zoom**: Stretches the 16:9 aspect ratio picture vertically.
    • **4:3**: Sets the picture to the 4:3 aspect ratio.
    • **Screen Fit**: Displays the full native HD signal that cannot be viewed using a normal TV.
       The picture size options may vary depending on the input source.

    ✎ The items available may differ depending on the selected mode.

    ✎ In **PC** Mode, only **16:9** and **4:3** mode can be adjusted.

    ✎ Settings can be adjusted and stored for each external device you have connected to an input of the TV.

    ✎ Temporary image retention may occur when viewing a static image on the set for more than two hours.

    ✎ **Wide Zoom**: Press the ► button to select **Position**, then press the **ENTER** button.
       Press the ▲ or ▼ button to move the screen up / down. Then press the **ENTER** button.

    ✎ **Zoom**: Press the ► button to select **Position**, then press the **ENTER** button. Press the ▲ or ▼ button to move the picture up and down. Then press the **ENTER** button. Press the ► button to select **Size**, then press the **ENTER** button. Press the ▲ or ▼ button to magnify or reduce the picture size in the vertical direction. Then press the **ENTER** button.

    ✎ After selecting **Screen Fit** in **HDMI** (1080i / 1080p) or **Component** (1080i / 1080p) mode: Select **Position** by pressing the ◄ or ►button. Use the ▲, ▼, ◄ or ► button to move the picture.

    ✎ **Reset**: Press the ◄ or ► button to select **Reset**, then press the **ENTER** button. You can initialize the setting.

    ✎ If you use the **Screen Fit** function with HDMI 720p input, 1 line will be cut at the top, bottom, left and right as in the overscan function.

    ⒝ You can select these options simply by pressing the **P.SIZE** button on the remote control.

TTX/MIX	SRS	P.SIZE
DUAL	GUIDE	SUBT.
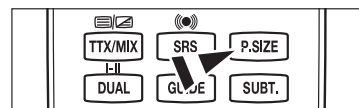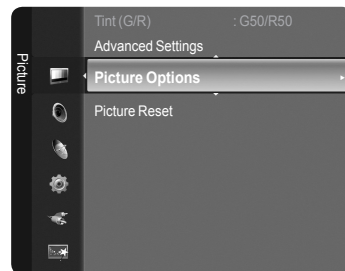
■ **Screen Mode**
When setting the picture size to **Auto Wide** in a 16:9 wide TV, you can determine the picture size you want to see the 4:3 WSS (Wide Screen Service) image or nothing. Each individual European country requires different picture size so this function is intended for users to select it.

    • **16:9**: Sets the picture to the 16:9 aspect ratio.
    • **Wide Zoom**: Select this menu to view 4:3 aspect ratio pictures over a 16:9 aspect ratio TV by stretching the 4:3 picture vertically.
    • **Zoom**: Stretches the 16:9 aspect ratio picture vertically.
    • **4:3**: Selects the screen mode as 4:3.
       ✎ This function is available in **Auto Wide** mode.
       ✎ This function is not available in **PC**, **Component** or **HDMI** mode.

■ **Digital NR → Off / Low / Medium / High / Auto**
If the broadcast signal received by your TV is weak, you can activate the Digital Noise Reduction feature to help reduce any static and ghosting that may appear on the screen.

    ✎ When the signal is weak, select one of the other options until the best picture is displayed.

■ **HDMI Black Level → Normal / Low**
You can directly select the black level on the screen to adjust the screen depth.

    ✎ This function is active only when the external input connects to HDMI (RGB signals).

■ **Film Mode**

You can optimize the picture mode for watching movies.

- **Off** : Basic video image processing applied and No auto-detection for film-based programs.
- **Auto**: Automatically adjusts for the best image quality between film and video programs.

■ **Screen Burn Protection**

Configures the Screen Burn Protection Options to prevent and reduce pixel burn.

When an image remains in one position too long, it may cause a permanent burn on the screen.

- **Pixel Shift**: To reduce the possibility of screen burn, this unit is equipped with screen burn prevention technology. This technology enables you to set picture movement up/down (Vertical) and side to side (Horizontal). The Time setting allows you to program the time between movement of the picture in minutes.

  ✎ Set **Pixel Shift** to On by pressing the ▲ or ▼ button, then press the **ENTER**⊡button.
  ✎ Select the required option by pressing the ▲ or ▼ button, then press the **ENTER**⊡ button.
  ✎ Available options: **Horizontal, Vertical, Time**.
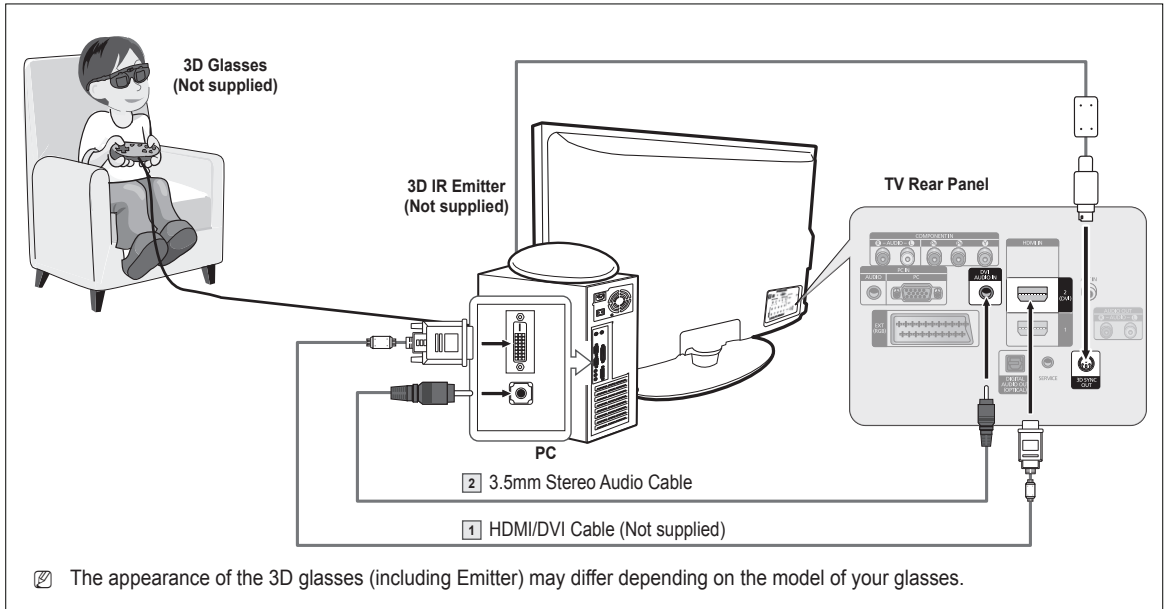 ✎ Optimum condition for pixel shift

	Item	TV/Ext/AV/Component/HDMI/PC
Horizontal	0~4	2
Vertical	0~4	2
Time (minute)	1~4 min	3 min

  ✎ The Pixel Shift value may differ depending on the monitor size (inches) and mode.
  ✎ This function is not available in the **Screen Fit** mode.

- **Scrolling**: This function helps remove after images on the screen by moving all the pixels on the PDP according to a pattern Use this function when there are remaining after images or symbols on the screen especially when you displayed a still image on the screen for a long time.
- **Side Grey**: When you watch TV with the screen ratio of 4:3, the screen is prevented from any damage by adjusting the white balance on both extreme left and right sides.
  - **Dark**: When you set the screen ratio to 4:3, it darkens the left and right sides.
  - **Light**: When you set the screen ratio to 4:3, it brightens the left and right sides.

Using the 3D Function

You can enjoy 3D movies and games on your TV. The 3D effects function enables you to view 3D images using special 3D glasses.

❑ **Connections**

⌦ The appearance of the 3D glasses (including Emitter) may differ depending on the model of your glasses.
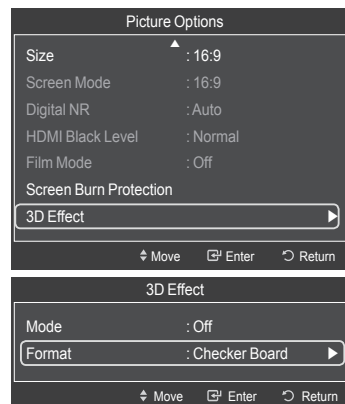
1. Connect a HDMI/DVI cable between the HDMI IN 2(DVI) jack on the TV and the PC output jack on your computer.
2. Connect a 3.5mm Stereo Audio Cable between the DVI AUDIO IN jack on the TV and the Audio Out jack of the sound card on your computer.
3. Connect the Emitter to the 3D SYNC OUT port on the rear panel of the TV.
4. Turn the TV on and set the source of the TV to HDMI2/DVI.

⌦ For more information on the 3D glasses (including the Emitter), refer to the user manual of your 3D glasses.
⌦ **Adjust the PC resolution**: - PS42B450/PS42B451 : 1024 x 768@60Hz
   - PS50B450/PS50B451 : 1024 x 768@60Hz, 1360 x 768@60Hz
⌦ Optimum PC resolution for PS50B450/PS50B451 is 1360x768. When 1024x768 signal is connected in 3D mode, the picture will be shown in 4:3 format with left and right side grey bars appeared.
⌦ The 3D IR Emitter communicates with the 3D glasses.
   Therefore, the 3D IR Emitter should be located near the 3D glasses.
⌦ It is activated when the HDMI or DVI input signal is RGB, and DVI Sound is supported.
⌦ When the power is turned on or off, the mode changes to the default (**Off**) and the **Format** is saved.
⌦ To use the 3D Effect function, a graphics card supporting 3D or 3D software is required.
⌦ The 3D glasses and the Emitter must be manufacturer by the same company.
⌦ If you play a game or watch TV while wearing the 3D glasses for long periods of time, you may experience eyestrain or a headache.
⌦ 3D glasses (including the Emitter) not manufactured by Samsung may not be supported.
⌦ If you find the screen flickering while the 3D function is used, change the environmental lighting darker or turn off the fluorescent lamp to watch the screen for its best condition.

❑ Changing the Mode

Provides the function to turn on the **3D Effect**. You can choose between **Mode1** and **Mode2**. To achieve the 3D effect, the 3D glasses shutter back and forth from the left to right and vice versa (left/right sync).

- **Off** : Turns the 3D Effect function off.
- **Mode1** : Mode 1 operates with right sync first.
- **Mode2** : Mode 2 operates with left sync first.
- **2D** : Provides picture converted 3D to 2D. You can choose this to watch 2D picture temporally when you feel dizzy, but you should choose Off to end 3D Effect completely.
    - ✐ If the 3D effect is not working properly, it means the Mode and 3D glasses may not be syncing properly. To put them in sync, switch to the other mode.

Picture Options

Size	▲ : 16:9
Screen Mode	: 16:9
Digital NR	: Auto
HDMI Black Level	: Normal
Film Mode	: Off
Screen Burn Protection	
3D Effect	▶

‡ Move   ⊞ Enter   ↺ Return

3D Effect

Mode	: Off
Format	: Checker Board ▶

‡ Move   ⊞ Enter   ↺ Return

❑ Changing the Format

Select the optimal input format to match your graphic cards or 3D Software.

- **Checker Board** : If the output format of your graphic card or 3D software is Checkerboard, select this input format.
- **Horizontal** : If the output format of your graphic card or 3D software is Horizontal interleaved, select this input format.
- **Vertical** : If the output format of your graphic card or 3D software is Vertical interleaved, select this input format.

❑ Picture Reset → Reset Picture Mode / Cancel

Resets all picture settings to the default values.

✐ Select a picture mode to be reset. The reset is performed for each picture mode.

Picture	
	Advanced Settings
	Picture Options
	Picture Reset
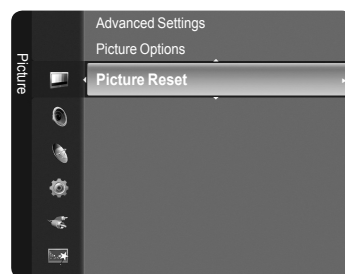
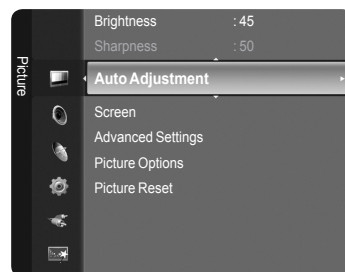# Setting up the TV with your PC

✐ Preset: Press the **SOURCE** button to select **PC** mode.

❑ Auto Adjustment

Auto Adjustment allows the PC screen of set to self-adjust to the incoming PC video signal. The values of fine, coarse and position are adjusted automatically.

✐ This function does not work in DVI-HDMI mode.

⌑ Press the **TOOLS** button to display **Tools** menu.
You can also set the adjustment by selecting **Tools → Auto Adjustment**.

Picture	
Brightness	: 45
Sharpness	: 50
Auto Adjustment	
Screen	
Advanced Settings	
Picture Options	
Picture Reset	

❑ Screen

▣ **Coarse**

Adjusts the frequency when vertical noise appears on the screen.

▣ **Fine**

Adjusts the screen to be clearer.

▣ **PC Position**

Adjust the PC's screen positioning if it does not fit the TV screen. Press the ▲ or ▼ button to adjusting the Vertical-Position. Press the ◄ or ► button to adjust the Horizontal-Position.

▣ **Image Reset**

You can replace all image settings with the factory default values.

Screen

Coarse		50
Fine		44
PC Position		
Image Reset		

‡ Move   ⊞ Enter   ↺ Return
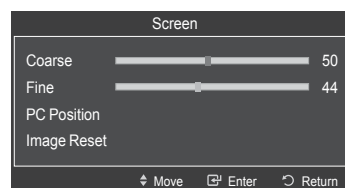
PC Display

❏ Setting Up Your PC Software (Based on Windows XP)

The Windows display-settings for a typical computer are shown below. The actual screens on your PC will probably be different, depending upon your particular version of Windows and your particular video card. However, even if your actual screens look different, the same basic set-up information will apply in almost all cases. (If not, contact your computer manufacturer or Samsung Dealer.)

1. First, click on 'Control Panel' on the Windows start menu.
2. When the control panel window appears, click on 'Appearance and Themes' and a display dialog-box will appear.
3. When the control panel window appears, click on 'Display' and a display dialog-box will appear.
4. Navigate to the 'Settings' tab on the display dialog-box.

The correct size setting (resolution)
Optimum
- PS42B450/PS42B451 : 1024x768 pixels
- PS50B450/PS50B451 : 1360x768 pixels

If a vertical-frequency option exists on your display settings dialog box, the correct value is '60' or '60 Hz'. Otherwise, just click 'OK' and exit the dialog box.
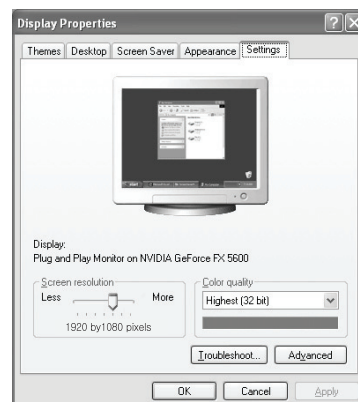
❏ Display Modes

Both screen position and size will vary depending on the type of PC monitor and its resolution.
The resolutions in the table are recommended.

◼ D-Sub and HDMI/DVI Input

Mode	Resolution	Horizontal Frequency (kHz)	Vertical Frequency (Hz)	Pixel Clock Frequency (MHz)	Sync Polarity (H/V)	PS42B450/ PS42B451	PS50B450/ PS50B451
IBM	640 x 350	31.469	70.086	25.175	+ / -	✔	✔
	720 x 400	31.469	70.087	28.322	- / +	✔	✔
MAC	640 x 480	35.000	66.667	30.240	- / -	✔	✔
	832 x 624	49.726	74.551	57.284	- / -	✔	✔
VESA DMT	640 x 480	31.469	59.940	25.175	- / -	✔	✔
		37.861	72.809	31.500	- / -	✔	✔
		37.500	75.000	31.500	- / -	✔	✔
	800 x 600	37.879	60.317	40.000	+ / +	✔	✔
		48.077	72.188	50.000	+ / +	✔	✔
		46.875	75.000	49.500	+ / +	✔	✔
	1024 x 768	48.363	60.004	65.000	- / -	✔	✔
		56.476	70.069	75.000	- / -	✔	✔
		60.023	75.029	78.750	+ / +	✔	✔
	1360 x 768	47.712	60.015	85.500	+ / +		✔
VESA CVT	720 x 576	35.910	59.950	32.750	- / +	✔	✔
	1280 x 720	44.772	59.855	74.500	- / +		✔
		56.456	74.777	95.750	- / +		✔
VESA GTF	1280 x 720	52.500	70.000	89.040	- / +		✔

🖉 When using an HDMI/DVI cable connection, you must use the **HDMI IN 2 (DVI)** jack.

🖉 The interlace mode is not supported.

🖉 The set might operate abnormally if a non-standard video format is selected.

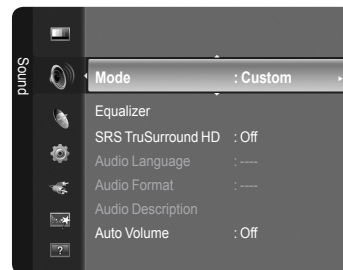# Sound Control

Changing the Sound Setting

❏ **Mode → Standard / Music / Movie / Clear Voice / Custom**

You can select the type of special sound effect to be used when watching a given broadcast.

    Press the **TOOLS** button to display **Tools** menu.
You can also configure the sound mode by selecting **Tools → Sound Mode**.

❏ **Equalizer**

The sound settings can be adjusted to suit your personal preferences.

• **Mode**: You can select a sound mode to suit your personal preferences.
• **Balance**: Controls the balance between the right and left speakers.
• **100Hz / 300Hz / 1KHz / 3KHz / 10KHz** (Bandwidth Adjustment): To adjust the level of different bandwidth frequencies
• **Reset**: Resets the equalizer settings to the default values.

❏ **SRS TruSurround HD → Off / On**

SRS TruSurround HD is the combined technology of TruSurround and FOCUS, TruBass.
SRS TruSurround HD is down mixing technology that makes the Surround Sound effect of virtual 5.1 channel via two speakers. This function provide not only rich deep bass at a low-pitched sound but also improve the resolution at a high-pitched sound.

    If the sound is abnormal while TV is playing music, please adjust the equalizer and **SRS TruSurround HD** (**Off/On**).

SRS(●)
TruSurround HD
D I G I T A L

    TruSurround HD, SRS and the (●) symbol are trademarks of SRS Labs, Inc.
TruSurround HD technology is incorporated under license from SRS Labs, Inc.

    You can select these options simply by pressing the **SRS** button on the remote control.
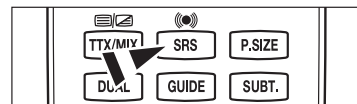
❏ **Audio Language** (only digital channel)

You can change the default value for audio languages. Displays the language information for the incoming stream.

    You can only select the language among the actual languages being broadcast.

❏ **Audio Format → MPEG / Dolby Digital** (only digital channel)

When sound is emitted from both the main speaker and the audio receiver, a sound echo may occur due to the decoding speed difference between the main speaker and the audio receiver. In this case, use the TV Speaker function.

    You can only select the language among the actual languages being broadcast.

▷◁ DOLBY
DIGITAL PLUS

    Manufactured under license from Dolby Laboratories.
Dolby and the double-D symbol are trademarks of Dolby Laboratories.

❏ **Audio Description** (only digital channel)

This is an auxiliary audio function that provides an additional audio track for visually challenged persons. This function handles the Audio Stream for the AD (Audio Description), when it is sent along with the Main audio from the broadcaster. Users can turn the Audio Description On or Off and control the volume.

■ **Audio Description → Off / On**

Turn the audio description function on or off.

■ **Volume**

You can adjust the audio description volume.

    Volume is active when **Audio Description** is set to **On**.

❑ **Auto Volume → Off / On**

Each broadcasting station has its own signal conditions, and so it is not easy to adjust the volume every time the channel is changed. This feature lets you automatically adjust the volume of the desired channel by lowering the sound output when the modulation signal is high or by raising the sound output when the modulation signal is low.

❑ **Speaker Select → External Speaker / TV Speaker**

If you want to hear the sound through separate speakers, cancel the internal amplifier.

 ✎ The **– ◢ +**, ◁× **MUTE** buttons do not operate when the **Speaker Select** is set to **External Speaker**.

 ✎ If you select **External Speaker** in the **Speaker Select** menu, the sound settings will be limited.

	TV's Internal Speakers	Audio Out (Optical, L / R Out) to Sound System
	TV / Ext. / AV / Component / PC / HDMI	**TV / Ext. / AV / Component / PC / HDMI**
TV Speaker	Speaker Output	Sound Output
External Speaker	Mute	Sound Output
Video No Signal	Mute	Mute

❑ **Sound Reset → Reset All / Reset Sound Mode / Cancel**

You can restore the Sound settings to the factory defaults.

Auto Volume	: Off
Speaker Select	: TV Speaker
Sound Reset	▶
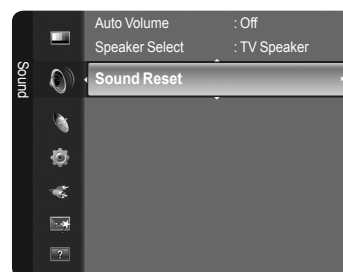
Sound

Selecting the Sound Mode

When you set to **Dual I II**, the current sound mode is displayed on the screen.

	Type of broadcast	On-screen indication				
NICAM Stereo	Regular broadcast (Standard audio)	**Mono** (Normal use)				
	Regular + NICAM Mono	**NICAM**	←→			**Mono** (Normal)
	NICAM-Stereo	**NICAM Stereo**	←→			**Mono** (Normal)
	NICAM Dual-I/II	**NICAM Dual-1**	→	**NICAM Dual-2**	→	**Mono** (Normal)
A2 Stereo	Regular broadcast (Standard audio)	**Mono** (Normal use)				
	Bilingual or DUAL-I/II	**Dual I**	←→			**Dual II**
	Stereo	**Stereo**	←→			**Mono** (Forced mono)

 ✎ If the stereo signal is weak and an automatic switching occurs, then switch to the mono.

 ✎ This function is only activated in stereo sound signal. It is deactivated in mono sound signal.

 ✎ This function is only available in **TV** mode.

 🖫 You can select these options simply by pressing the **DUAL** button on the remote control.

Function Description

Configuring the Setup Menu

❑ **Language**

You can set the menu language.

❑ **Game Mode → Off / On**

When connecting to a game console such as PlayStationTM or XboxTM, you can enjoy a more realistic gaming experience by selecting the game menu.

■ **When the Game Mode is On**

- **Picture Mode** is automatically changed to **Standard** and users cannot change the mode.
- **Sound Mode** is automatically changed to **Custom** and users cannot change the mode. Adjust the sound using the equalizer.
- The **Reset** in the **Sound** menu is activated. **Reset** function initializes the **Equalizer** settings to the factory default setting.

▨ **Game Mode** is not available in regular TV mode or **Game Mode** set to **Off**.

▨ If the picture is poor when external device is connected to TV, check if **Game Mode** is **On**.

▨ If you display the TV menu in **Game mode**, the screen shakes slightly.

▨ The mark (🎮) appears on the screen which means that **Game Mode** is on with the selected source.

▨ This function supports only game function.

▨ **Game mode** is not available in **PC** mode.
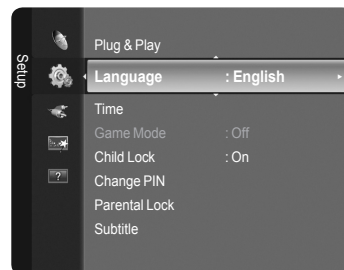
❑ **Child Lock → Off / On**

This feature allows you to prevent unauthorized users, such as children, from watching unsuitable programmes by muting out video and audio.

▨ Before the setup screen appears, the PIN number input screen appears. Enter your 4 digit PIN number.

▨ The default PIN number of a new TV set is '0-0-0-0'. You can change the PIN by selecting **Change PIN** from the menu.

▨ You can lock some channels in Channel List. (refer to page 15)

▨ **Child Lock** is available only in TV mode.

❑ **Change PIN**

You can change your personal ID number that is required to set up the TV.

▨ Before the setup screen appears, the PIN number input screen appears. Enter your 4 digit PIN number.

▨ The default PIN number of a new TV set is '0-0-0-0'.

▨ If you forget the PIN code, press the remote control buttons in the following sequence, which resets the PIN to '0-0-0-0': **POWER** (Off), 🔇**MUTE, 8, 2, 4, POWER** (On).

❑ **Parental Lock**

This feature allows you to prevent unauthorized users, such as children, from watching unsuitable programmes by a 4-digit PIN (Personal Identification Number) code that is defined by the user.

▨ Before the setup screen appears, the PIN number input screen appears. Enter your 4 digit PIN number.

▨ The default PIN number of a new TV set is '0-0-0-0'. You can change the PIN by selecting **Change PIN** from the menu.

▨ When the parental ratings are set, the 🔒 symbol is displayed.

▨ **Allow All**: Press to unlock all TV ratings.
  Block All: Press to lock all TV ratings.

❑ **Subtitle**

You can activate and deactivate the subtitles. Use this menu to set the Subtitle Mode. **Normal** under the menu is the basic subtitle and **Hard of hearing** is the subtitle for a hearing-impaired person.

- **Subtitle → Off / On**: Switches subtitles off or on.
- **Mode → Normal / Hard of hearing**: Sets the subtitle mode.
- **Subtitle Language**: Set the subtitle language.

▨ If the programme you are watching does not support the **Hard of hearing** function, **Normal** automatically activates even though **Hard of hearing** mode is selected.

▨ English is the default in cases where the selected language is unavailable in the broadcast.

▨ You can select these options simply by pressing the **SUBT.** button on the remote control.

❑ **Teletext Language**

You can set the Teletext language by selecting the language type.

✎ English is the default in cases where the selected language is unavailable in the broadcast.

❑ **Preference**

■ **Primary Audio Language / Secondary Audio Language / Primary Subtitle Language / Secondary Subtitle Language / Primary Teletext Language / Secondary Teletext Language**
Using this feature, users can select one of the languages. The language selected here is the default when the user selects a channel.

If you change the language setting, the Subtitle Language, Audio Language, and the Teletext Language of the Language menu are automatically changed to the selected language.

The Subtitle Language, Audio Language, and the Teletext Language of the Language menu show a list of languages supported by the current channel and the selection is highlighted. If you change this language setting, the new selection is only valid for the current channel. The changed setting does not change the setting of the Primary Subtitle Language, Primary Audio Language, or the Primary Teletext Language of the Preference menu.

❑ **Digital Text → Disable / Enable**

If the programme is broadcast with digital text, this feature is enabled.

✎ **MHEG (Multimedia and Hypermedia Information Coding Experts Group)**
An International standard for data encoding systems used in multimedia and hypermedia. This is at a higher level than the MPEG system which includes data-linking hypermedia such as still images, character service, animation, graphic and video files as well as multimedia data. MHEG is user runtime interaction technology and is being applied to various fields including VOD (Video-On-Demand), ITV (Interactive TV), EC (Electronic Commerce), tele-education, tele-conferencing, digital libraries and network games.

Setup		
	Teletext Language	: -----
	Preference	
	Digital Text	**: Enable**
	Melody	: Medium
	Energy Saving	: Off
	Common Interface	
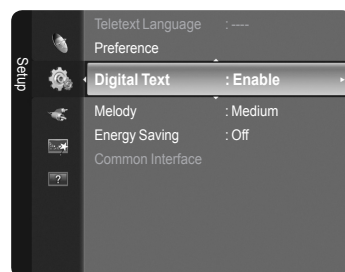
❑ **Melody → Off / Low / Medium / High**

The TV power on / off melody sound can be adjusted.

✎ **The Melody does not play**
- When no sound is output from the TV because the **MUTE** button has been pressed.
- When no sound is output from the TV because the – ◢ (Volume) button has been pressed.
- When the TV is turned off by **Sleep Timer** function.

❑ **Energy Saving**

This feature adjusts the brightness of the TV in order to reduce power consumption. When watching TV at night, set the **Energy Saving** mode option to **High** to reduce eye fatigue as well as power consumption.

- **Off**: Turns off the energy saving function.
- **Low**: Sets the TV to low energy saving mode.
- **Medium**: Sets the TV to medium energy saving mode.
- **High**: Sets the TV to high energy saving mode.

⌨ Press the **TOOLS** button to display **Tools** menu.
You can also set the Energy Saving option by selecting **Tools → Energy Saving**.

❑ **Common Interface**

■ **Installing the CI Card**

1. Purchase the CI CAM module by visiting your nearest dealer or by phone.

2. Insert the CI CARD into the CAM in the direction of the arrow until it fits.

3. Insert the CAM with the CI CARD installed into the common interface slot.

✎ Insert the CAM in the direction of the arrow, right up to the end so that it is parallel with the slot.

4. Check if you can see a picture on a scrambled signal channel.
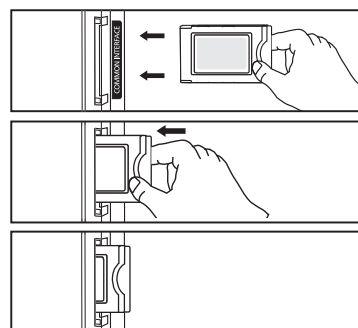
■ **CI Menu**

This enables the user to select from the CAM-provided menu.
Select the CI Menu based on the menu PC Card.

■ **Application Info.**

This contains information on CAM inserted in the CI slot and displays it.
The Application Info inserting is about the CI CARD. You can install the CAM anytime whether the TV is ON or OFF.

✎ CAM is not supported in some countries and regions,check with your authorized dealer.

Setting the Time

❏ **Clock**

Setting the clock is necessary in order to use the various timer features of the TV.

 ✐ The current time will appear every time you press the **INFO** button.
 ✐ If you disconnect the power cord, you have to set the clock again.

■ **Clock Mode**

You can set up the current time manually or automatically.

 • **Auto**: Set the current time automatically using the time from the digital broadcast.
 • **Manual**: Set the current time to a manually specified time.

■ **Clock Set**

You can set the current time manually.

 ✐ Set up this item when you have set **Clock Mode** to **Manual**.
 ✐ You can set the **Day, Month, Year, Hour, Minute** directly by pressing the number buttons on the remote control.

❏ **Sleep Timer → Off / 30 min / 60 min / 90 min / 120 min / 150 min / 180 min**

The sleep timer automatically shuts off the TV after a preset time.

 ✐ The TV automatically switches to standby mode when the timer reaches 0.
 ✐ To cancel the **Sleep Timer** function, select **Off**.

> ⛶ Press the **TOOLS** button to display **Tools** menu.
> You can also set the sleep timer by selecting **Tools → Sleep Timer**.

❏ **Timer 1 / Timer 2 / Timer 3**

Three different on / off timer settings can be made.

■ **On Time**: Set the hour, minute, am/pm, and Activate/Inactivate.
(To activate timer with the setting you've chosen, set to **Activate**.)

■ **Off Time**: Set the hour, minute, am/pm, and Activate/Inactivate.
(To activate timer with the setting you've chosen, set to **Activate**.)

■ **Volume**: Set the required volume level.

■ **Antenna**: You can select either DTV or ATV when the TV turns on automatically.

■ **Channel**: Select the desired channel.

■ **Repeat**: Select **Once**, **Everyday**, **Mon~Fri**, **Mon~Sat**, **Sat~Sun**, or **Manual**.

 ✐ When **Manual** is selected, press the ► button to select the desired day of the week. Press the **ENTER**⏎ button over the desired day and the ✓ mark will appear.

✐ You must set the clock first.

✐ You can set the hour, minute and programme by pressing the number buttons on the remote control.

✐ **Auto Power Off**
When you set the timer On, the television will eventually turn off, if no controls are operated for 3 hours after the TV was turned on by the timer. This function is only available in timer On mode and prevents overheating, which may occur if a TV is on for too long time.

Setup		
	Plug & Play	
	Language	: English
	Time	▸
	Game Mode	: Off
	Child Lock	: On
	Change PIN	
	Parental Lock	
	Subtitle	
	Teletext Language	: ----

Time		
Clock	: -- : --	►
Sleep Timer	: Off	
Timer 1	: Inactivated	
Timer 2	: Inactivated	
Timer 3	: Inactivated	

◆ Move ⏎ Enter ↩ Return
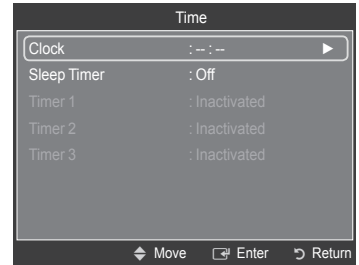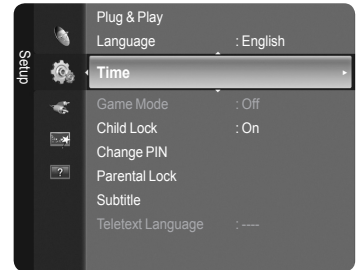
Source List / Edit Name

❏ **Source List**
Use to select TV or other external input sources such as DVD players or Cable Box / Satellite receivers (Set-Top Box) connected to the TV. Use to select the input source of your choice.

◻ **TV, Ext., AV, PC, Component, HDMI1, HDMI2/DVI, HDMI3.**

  ✐ You can choose only those external devices that are connected to the TV. In the **Source List**, connected inputs will be highlighted and sorted to the top. Inputs that are not connected will be sorted to the bottom.

  ✐ **Using the Colour buttons on the remote with the Source list**
    - **Red** (Refresh): Refreshes the connecting external devices.
    - ♫**TOOLS** (Tools): Displays the **Edit Name** and **Information** menus.

  ⑤ Press the **SOURCE** button on the remote control to view an external signal source. TV mode can be selected by pressing the **TV** button, number buttons (**0~9**), and the **P ∧** / **∨** button on the remote control.
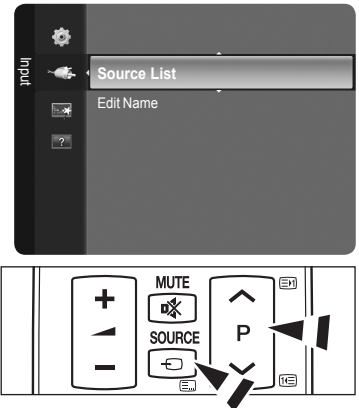
❏ **Edit Name**
You can name the device connected to the input jacks to make your input source selection easier.

◻ **VCR / DVD / Cable STB / Satellite STB / PVR STB / AV Receiver / Game / Camcorder / PC / DVI PC / DVI / TV / IPTV / Blu-ray / HD DVD / DMA**

  ✐ When a PC with a resolution of PS42B450/PS42B451: 640x480@60Hz, PS50B450/PS50B451: 640x480@60Hz, 1280x720@60Hz is connected to the **HDMI IN 2 (DVI)** port, you should set the **HDMI2 / DVI** mode to **PC** in the **Edit Name** of the **Input** mode.

Supported Program

❏ **Self Diagnosis**
◻ **Picture Test, Sound Test, Signal Information**

If you think you have the Picture, Sound, Signal problem, perform the test. You can check the problem state.

  ✐ If you hear no sound from the TV's speakers, before performing the sound test, make sure **Speaker Select** is set to **TV speaker** in the **Sound** menu.

  ✐ The melody will be heard during the test even if **Speaker Select** is set to **External Speaker** or the sound is muted by pressing the ⊀**MUTE** button.

  ✐ If the signal strength meter indicates that the signal is weak, physically adjust your antenna to increase the signal strength. Continue to adjust the antenna until you find the best position with the strongest signal.

❏ **Software Upgrade**
To keep your product up-to-date with new Digital Television features then software upgrades are periodically broadcast as part of the normal Television signal. It will automatically detect these signals and display the software upgrade banner. You are given the option to install the upgrade.

◻ **By USB**
Insert a USB drive containing the firmware upgrade into TV. Please be careful to not disconnect the power or remove the USB drive while upgrades are being applied. The TV will turn off and turn on automatically after completing the firmware upgrade. Please check the firmware version after the upgrades are complete. When software is upgraded, video and audio settings you have made will return to their default (factory) settings. We recommend you write down your settings so that you can easily reset them after the upgrade.

◻ **By Channel**
Upgrades the software using the broadcasting signal.

◻ **Standby Mode Upgrade**
To continue software upgrade with master power on, Select On by pressing the ▲ or ▼ button. 45 minutes after entering standby mode, a manual upgrade is automatically conducted. Since the power of the unit is turned on internally, the screen may be on slightly for the product. This phenomenon may continue for more than 1 hour until the software upgrade is completed.

◻ **Alternative Software**
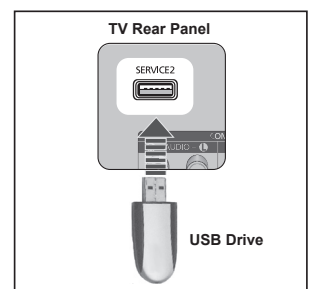Replace the current software with the alternative.

❏ **HD Connection Guide**
The brief instruction on **How to get the best performance from your new HDTV** is displayed. We offer the connection method for HD devices.

❏ **Contact Samsung**
You can know the Samsung Call center, website and information for product.

 ✐ You can move the previous or next page by pressing the ▲ or ▼ button.

About Anynet+

Connecting Anynet+ Devices

Anynet+ is a function that enables you to control all connected Samsung devices that support Anynet+ with your Samsung TV's remote.
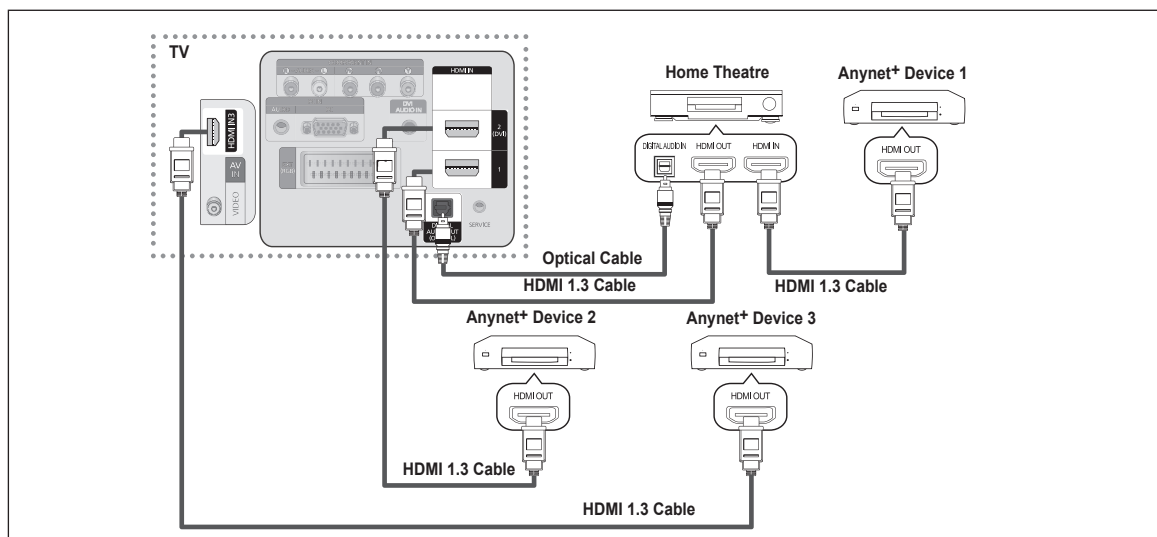
The Anynet+ system can be used only with Samsung devices that have the Anynet+ feature. To be sure your Samsung device has this feature, check if there is an Anynet+ logo on it.

❑ **To connect to a TV**
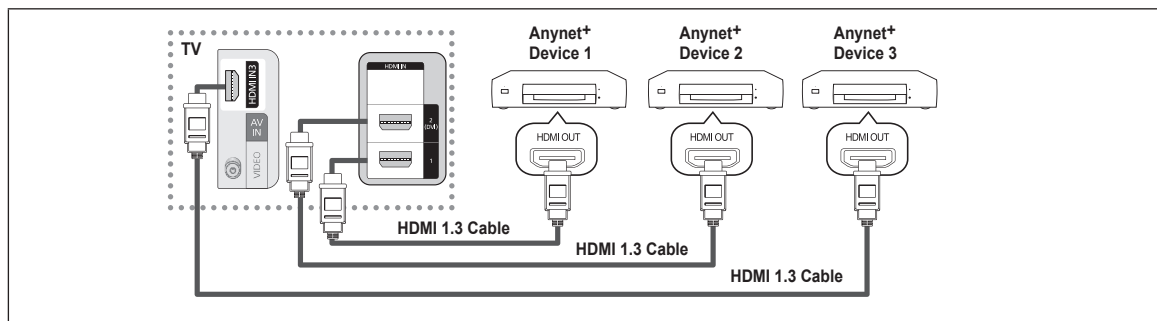
1. Connect the [HDMI IN 1], [HDMI IN 2(DVI)] or [HDMI IN 3] jack on the TV and the HDMI OUT jack of the corresponding Anynet+ device using an HDMI cable.

❑ **To connect to Home Theater**

1. Connect the [HDMI IN 1], [HDMI IN 2(DVI)] or [HDMI IN 3] jack on the TV and the HDMI OUT jack of the corresponding Anynet+ device using an HDMI cable.

2. Connect the HDMI IN jack of the home theater and the HDMI OUT jack of the corresponding Anynet+ device using an HDMI cable.

   ✎ Connect the Optical cable between the DIGITAL AUDIO OUT (OPTICAL) jack on your TV and the Digital Audio Input on the Home Theater.

   ✎ When following the connection above, the Optical jack only outputs 2 channel audio. You will only hear sound from the Home Theater's Front Left and Right speakers and the subwoofer. If you want to hear 5.1 channel audio, connect the DIGITAL AUDIO OUT (OPTICAL) jack on the DVD player or Cable/Satellite Box (ie Anynet Device 1 or 2) directly to the Amplifier or Home Theater, not the TV.

   ✎ Connect only one Home Theater.

   ✎ You can connect an Anynet+ device using the HDMI 1.3 cable. Some HDMI cables may not support Anynet+ functions.

   ✎ Anynet+ works when the AV device supporting Anynet+ is in the Standby or On status.

   ✎ Anynet+ supports up to 12 AV devices in total. Note that you can connect up to 3 devices of the same type.

Setting Up Anynet+

⏋ Press the **TOOLS** button to display **Tools** menu.
You can also display Anynet+ menu by selecting **Tools → Anynet+(HDMI-CEC)**.

❑ **Setup**

■ **Anynet+(HDMI-CEC) → Off / On**
To use the Anynet+ Function, **Anynet+ (HDMI-CEC)** must be set to **On**.

☑ When the **Anynet+ (HDMI-CEC)** function is disabled, all the Anynet+ related operations are deactivated.

■ **Auto Turn Off → Yes / No**
Setting an Anynet+ Device to turn Off Automatically when the TV is Turned Off

☑ The active source on the TV remote must be set to TV to use the Anynet+ function.

☑ If you set **Auto Turn Off** to **Yes**, connected external devices are also turned off when the TV is turned off. If an external device is still recording, it may or may not turn off.
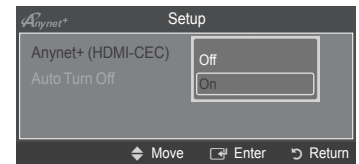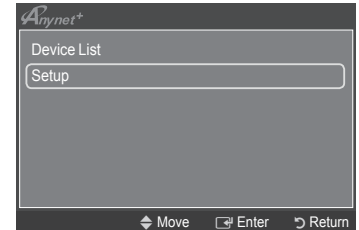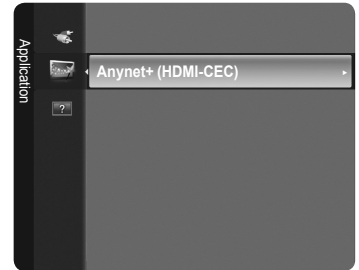
Scanning and Switching between Anynet+ Devices

1. Press the **TOOLS** button. Press the **ENTER**⤶ button to select **Anynet+ (HDMI-CEC)**.
2. Press the ▲ or ▼ button to select **Device List**, then press the **ENTER**⤶ button.

   ☑ Anynet+ devices connected to the TV are listed. If you cannot find a device you want, press the red button to scan for devices.

   ☑ Only when you set **Anynet+ (HDMI-CEC)** to **On** in the **Setup** menu, the **Device List** menu appears.

3. Press the ▲ or ▼ button to select to a particular device and press the **ENTER**⤶ button. It is switched to the selected device.

☑ Switching to the selected devices may take up to 2 minutes. You cannot cancel the operation during the switching operation.

☑ The time required to scan for devices is determined by the number of connected devices.

☑ When the device scan is complete, the number of devices found are not displayed.

☑ Although the TV automatically searches the device list when the TV is turned on via the power button, devices connected to the TV when the TV is on or under some conditions are not automatically displayed in the device list. Press the red button to search for the connected device.

☑ If you have selected external input mode by pressing the **SOURCE** button, you cannot use the Anynet+ function. Make sure to switch to an Anynet+ device by using the **Device List**.
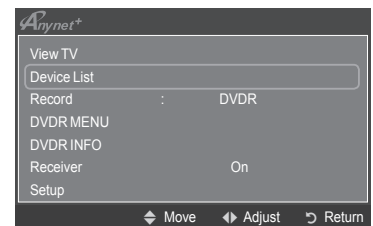
Continued...

❑ **Anynet⁺ Menu**

The **Anynet⁺** menu changes depending on the type and status of the Anynet+ devices connected to the TV.

Anynet⁺ Menu	Description
View TV	Anynet+ mode changes to TV broadcast mode.
Device List	Shows the Anynet+ device list.
(device_name) MENU	Shows the connected device menus. E.g. If a DVD recorder is connected, the disc menu of the DVD recorder will appear.
(device_name) INFO	Shows the play menu of the connected device. E.g. If a DVD recorder is connected, the play menu of the DVD recorder will appear.
Record: (*recorder)	Starts recording immediately using the recorder. (This is only available for devices that support the recording function.)
(*recorder) Reserve Recording	Enables reserving a recording for the recorder. (This is only available for devices that support the recording reservation function.)
Stop Recording: (*recorder)	Stops recording.
Receiver	Sound is played through the receiver.

✐ If more than one recording device is connected, they are displayed as (*recorder) and if only one recording device is connected, it will be represented as (*device_name).

❑ **TV Remote Control Buttons Available in Anynet+ Mode**

Device Type	Operating Status	Available Buttons
Anynet⁺ Device	After switching to the device, when the menu of the corresponding device is displayed on the screen.	Numeric buttons ▲/▼/◄/►/**ENTER**⏎ buttons Colour buttons / **EXIT** button
	After switching to the device, while playing a file	⏪(Backward search) / ⏩(Forward search) ⏹(Stop) / ▶(Play) / ⏸(Pause)
Device with built-in Tuner	After switching to the device, when you are watching a TV programme	**P** ⌃ / ⌄ button
Audio Device	When Receiver is activated	◢ + / − button 🔇 **MUTE** button

✐ The Anynet+ function only works when the active source on the TV remote control is set to TV.

✐ The ▶ button works only while in the recordable state.

✐ You cannot control Anynet+ devices using the buttons on the TV. You can control Anynet+ devices only using the TV remote control.

✐ The TV remote control may not work under certain conditions. In this case, reselect the Anynet+ device.

✐ The Anynet+ functions do not operate with other manufacturers' products.

✐ The ⏪, ⏩ operations may differ depending on the device.

Recording

You can make a recording of a TV programme using a Samsung recorder.

1. Press the **TOOLS** button. Press the **ENTER**⏎ button to select **Anynet+ (HDMI-CEC)**.

2. Press the ▲ or ▼ button to select **Record: (device_name)**, then press the **ENTER**⏎ button. Recording begins.

   ✐ **When there is more than one recording device**
   When multiple recording devices are connected, the recording devices are listed. Press the ▲ or ▼ button to select a recording device and press the **ENTER**⏎ button. Recording begins.

   ✐ **When the recording device is not displayed**
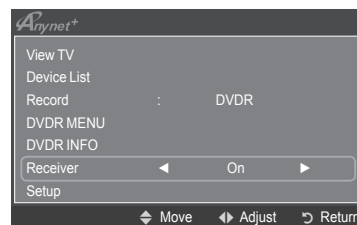   Select **Device List** and press the red button to search devices.

✐ You can record the source streams by selecting **Record: (device_name)**.

✐ Pressing the ▶ button will record whatever you are currently watching. If you are watching video from another device, the video from the device is recorded.

✐ Before recording, check whether the antenna jack is properly connected to the recording device. To properly connect an antenna to a recording device, refer to the recording device's users manual.

A*nynet*⁺		
View TV		
Device List		
Record	:	DVDR
DVDR MENU		
DVDR INFO		
Receiver		On
Setup		
	⬍ Move ◀▶ Adjust � Return	

Listening through a Receiver (Home theater)

You can listen to sound through a receiver instead of the TV speaker.

1. Press the **TOOLS** button. Press the **ENTER** button to select **Anynet+ (HDMI-CEC)**.
2. Press the ▲ or ▼ button to select **Receiver**. Press the ◄ or ► button to select **On** or **Off**.

▨ If your receiver supports audio only, it may not appear in the device list.

▨ The receiver will work when you have properly connected the Optical IN jack of the receiver to the Optical Out jack of the TV.

▨ When the receiver (home theater) is set to On, you can hear sound output from the TV's Optical jack. When the TV is displaying a DTV(air) signal, the TV will send out 5.1 channel sound to the Home theater receiver. When the source is a digital component such as a DVD and is connected to the TV via HDMI, only 2 channel sound will be heard from the Home Theater receiver.

▨ If there is a power interruption to the TV when the **Receiver** is set to **On** (by disconnecting the power cord or a power failure), the **Speaker Select** may be set to **External Speaker** when you turn the TV on again. (see page 24)

```
𝓐nynet⁺
┌──────────────────────────────────┐
│ View TV                          │
│ Device List                      │
│ Record          :      DVDR      │
│ DVDR MENU                        │
│ DVDR INFO                        │
│ Receiver        ◄      On     ►  │
│ Setup                            │
└──────────────────────────────────┘
   ⬍ Move   ◄► Adjust   ↺ Return
```

Troubleshooting for Anynet⁺

| Symptom	Solution
Anynet⁺ does not work.	• Check if the device is an Anynet⁺ device. The Anynet⁺ system supports Anynet⁺ devices only. • Connect only one receiver (home theater). • Check if the Anynet⁺ device power cord is properly connected. • Check the Anynet⁺ device's Video/Audio/HDMI 1.3 cable connections. • Check whether **Anynet⁺ (HDMI-CEC)** is set to **On** in the Anynet⁺ setup menu. • Check whether the TV remote control is in TV mode. • Check whether it is Anynet⁺ exclusive remote control. • Anynet⁺ doesn't work in certain situations. (Searching channels, Plug & Play, etc.) • When connecting or removing the HDMI 1.3 cable, please make sure to search devices again or turn your TV off and on again. • Check if the Anynet⁺ Function of Anynet⁺ device is set on.
I want to start Anynet⁺.	• Check if the Anynet⁺ device is properly connected to the TV and check if the **Anynet⁺ (HDMI-CEC)** is set to **On** in the Anynet⁺ Setup menu. • Press the **TV** button on the TV remote control to switch to TV. Then press the **TOOLS** button to show the Anynet⁺ menu and select a menu you want.
I want to exit Anynet⁺.	• Select View TV in the Anynet⁺ menu. • Press the **SOURCE** button on the TV remote control and select a device other than Anynet⁺ devices. • (Note that the channel button operates only when a tuner-embedded Anynet⁺ device is not connected.)
The message Connecting to Anynet+ device... appears on the screen.	• You cannot use the remote control when you are configuring Anynet⁺ or switching to a view mode. • Use the remote control when the Anynet⁺ setting or switching to view mode is complete.
The Anynet⁺ device does not play.	• You cannot use the play function when **Plug & Play** is in progress.
The connected device is not displayed.	• Check whether or not the device supports Anynet⁺ functions. • Check whether or not the HDMI 1.3 cable is properly connected. • Check whether **Anynet⁺ (HDMI-CEC)** is set to **On** in the Anynet⁺ setup menu. • Search Anynet⁺ devices again. • You can connect an Anynet⁺ device using the HDMI 1.3 cable only. Some HDMI cables may not support Anynet⁺ functions. • If it is terminated by an abnormal situation such as disconnecting the HDMI cable or power cord or a power failure, please repeat the device scan.
The TV programme cannot be recorded.	• Check whether the antenna jack on the recording device is properly connected.
The TV sound is not output through the receiver.	• Connect the optical cable between TV and the receiver.

Recommendations for Use

Teletext Feature

Most television stations provide written information services via Teletext. The index page of the teletext service gives you information on how to use the service. In addition, you can select various options to suit your requirements by using the remote control buttons.

 ⌦ For teletext information to be displayed correctly, channel reception must be stable. Otherwise, information may be missing or some pages may not be displayed.

❶ ▭ **(exit)**

Exit from the teletext display.

❷ ▤ **(index)**

Used to display the index (contents) page at any time while you are viewing teletext.

❸ ▤ **(store)**

Used to store the teletext pages.

❹ ▤ **(size)**

Press to display the double-size letters in the upper half of the screen. For lower half of the screen, press it again. To display normal screen, press it once again.

❺ ▤ **(reveal)**

Used to display the hidden text (answers to quiz games, for example). To display normal screen, press it again.

❻ ▤/▤ **(teletext on/mix)**

Press to activate teletext mode after selecting the channel providing the teletext service. Press it twice to overlap the teletext with the current broadcasting screen.

❼ ▤ **(sub-page)**

Used to display the available sub-page.

❽ ▤ **(page up)**

Used to display the next teletext page.

❾ ▤ **(page down)**

Used to display the previous teletext page.

❿ ▤ **(mode)**

Press to select the teletext mode (LIST/FLOF). If you press it in the LIST mode, it switches into the List save mode. In the List save mode, you can save teletext page into list using the ▤(store) button.

⓫ ▤ **(hold)**

Used to hold the display on a given page if the selected page is linked with several secondary pages which follow on automatically. To resume, press it again.

⓬ ▤ **(cancel)**

Used to display the broadcast when searching for a page.

⓭ **Colour buttons (red/green/yellow/blue)**

If the FASTEXT system is used by a broadcasting company, the different topics covered on a teletext page are colour-coded and can be selected by pressing the coloured buttons. Press one of them corresponding to the required. The page is displayed with other coloured information that can be selected in the same way. To display the previous or next page, press the corresponding coloured button.
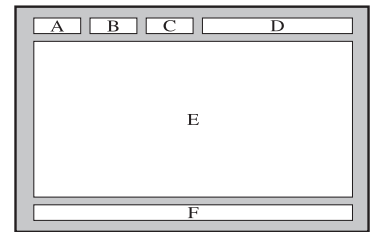
 ⌦ You can change teletext pages by pressing the numeric buttons on the remote control.
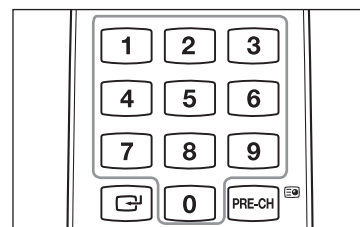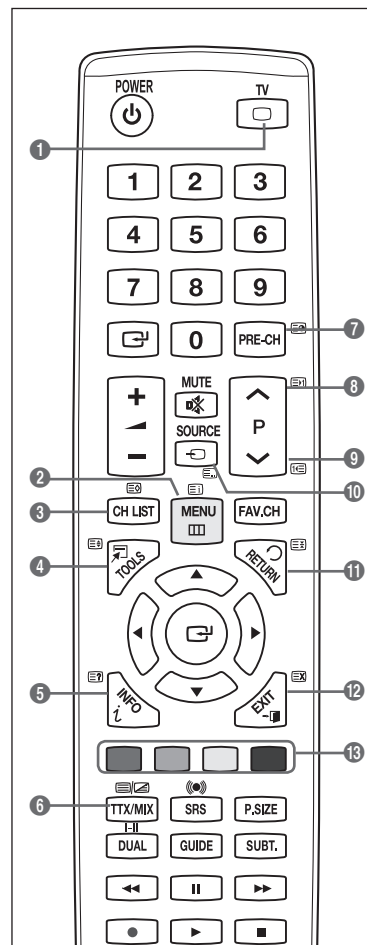
Continued...

The teletext pages are organized according to six categories:

Part	Contents
A	Selected page number.
B	Broadcasting channel identity.
C	Current page number or search indications.
D	Date and time.
E	Text.
F	Status information.
	FASTEXT information.

▨ Teletext information is often divided between several pages displayed in sequence, which can be accessed by:
   - Entering the page number
   - Selecting a title in a list
   - Selecting a coloured heading (FASTEXT system)

▨ Press the **TV** button to exit from the teletext display.
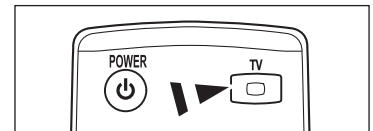
Wall Mount Kit Specifications (VESA)

Install your wall mount on a solid wall perpendicular to the floor.
When attaching to other building materials, please contact your nearest dealer.
If installed on a ceiling or slanted wall, it may fall and result in severe personal injury.

| Product Family	inch	VESA Spec. (A * B)	Standard Screw	Quantity
LCD-TV	19" ~22"	100 * 100	M4	4
	23"~29"	200 * 100		
	30"~40"	200 * 200	M6	
	46"~55"	400 * 400	M8	
	57"~70"	800 * 400		
	80" ~	1400 * 800		
PDP-TV	42"~ 50"	400 * 400	M8	4
	58"~ 63"	600 * 400		
	70" ~	800 * 400		
	80" ~	1400 * 800		
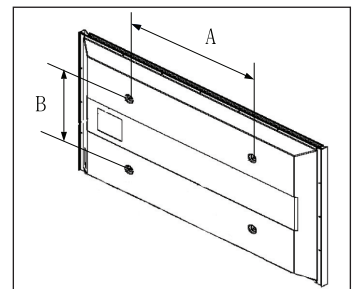
▨ We provided the standard dimensions for wall mount kits as shown in the table above.
▨ When purchasing our wall mount kit, a detailed installation manual and all parts necessary for assembly are provided.
▨ Do not use screws longer than the standard dimension, as they may cause damage to the inside of the TV set.
▨ For wall mounts that do not comply with the VESA standard screw specifications, the length of the screws may differ depending on their specifications.
▨ Do not use screws that do not comply with the VESA standard screw specifications.
   Do not use fasten the screws too strongly, this may damage the product or cause the product to fall, leading to personal injury. Samsung is not liable for these kinds of accidents.
▨ Samsung is not liable for product damage or personal injury when a non-VESA or non-specified wall mount is used or the consumer fails to follow the product installation instructions.
▨ Our 57" and 63" models do not comply with VESA Specifications. Therefore, you should use our dedicated wall mount kit for this model.
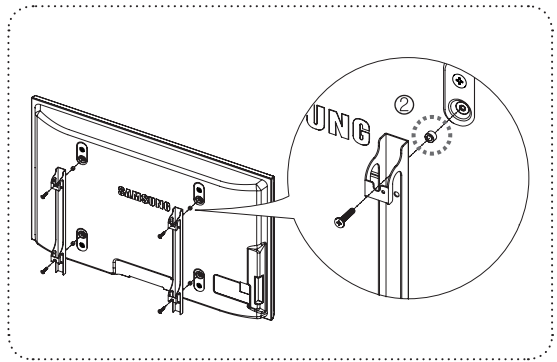▨ Do not exceed 15 degrees tilt when mounting this TV.

⚠ Do not install your Wall Mount Kit while your TV is turned on.
   It may result in personal injury due to electric shock.

Preparing before installing Wall- Mount on the wall

Case A. Installing SAMSUNG Wall-Mount
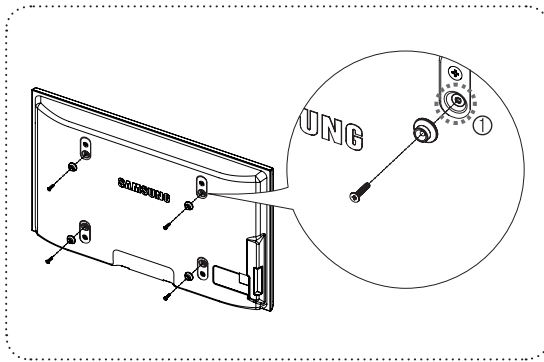
**Case B.** Installing other company's Wall-Mount

1. Install Wall Mount with the torque range of 15kgf·cm or less. Make sure that parts can be damaged if the torque is out of the specified range.
2. Accessory Kit contains Holder–Ring [②] for installing other company's Wall-Mount on Samsung TV. (Case B)
   - ✎ Screw down the hole [①] when installing wall-mount on the wall.

Securing the TV to the Wall

⚠ Pulling, pushing, or climbing on the TV may cause the TV to fall. In particular, ensure your children do not hang over or destabilize the TV; doing so may cause the TV to tip over, causing serious injuries or death. Follow all safety precautions provided on the included Safety Flyer. For added stability, install the anti-fall device for safety purposes, as follows.
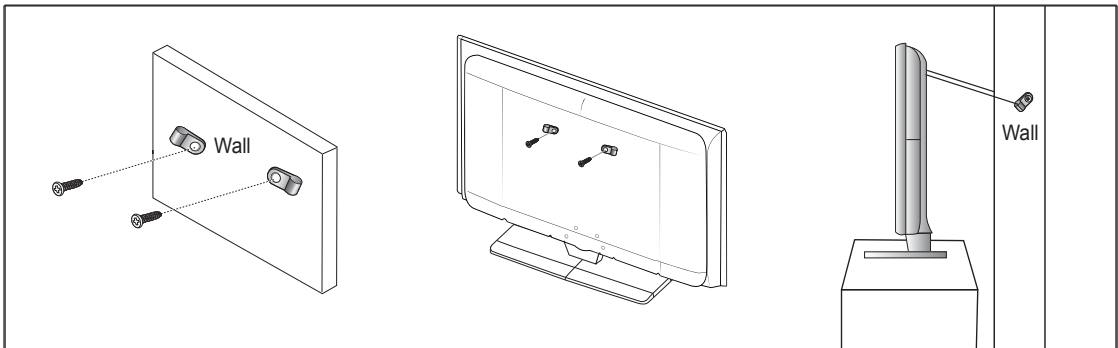
❑ **To avoid the TV from falling**

1. Put the screws into the clamps and firmly fasten them onto the wall. Confirm that the screws have been firmly installed onto the wall.
   - ✎ You may need additional material such as an anchor depending on the type of wall.
   - ✎ Since the necessary clamps, screws, and string are not supplied, please purchase these additionally.
2. Remove the screws from the center back of the TV, put the screws into the clamps, and then fasten the screws onto the TV again.
   - ✎ Screws may not be supplied with the product.
3. Connect the clamps fixed onto the TV and the clamps fixed onto the wall with a strong string and then tie the string tightly.
   - ✎ Install the TV near to the wall so that it does not fall backwards.
   - ✎ It is safe to connect the string so that the clamps fixed on the wall are equal to or lower than the clamps fixed on the TV.
   - ✎ Untie the string before moving the TV.
4. Verify all connections are properly secured. Periodically check connections for any sign of fatigue for failure. If you have any doubt about the security of your connections,contact a professional installer.

Troubleshooting

Before contacting the Samsung after-sales service, perform the following simple checks.
If you cannot solve the problem using the instructions below, note the model and serial number of the television and contact your local dealer.

No sound or picture	• Check that the mains lead has been connected to a wall socket. • Check that you have pressed the button on your set. • Check the picture contrast and brightness settings. • Check the volume. • Check if **Speaker Select** is set to **External Speaker**.
Normal picture but no sound	• Check the volume. • Check whether the ◀× **MUTE** button has been pressed on the remote control.
No picture or black and white picture	• Adjust the colour settings. • Check that the broadcast system selected is correct.
Sound and picture interference	• Try to identify the electrical appliance that is affecting the television, then move it further away. • Plug the television into a different main socket.
Blurred or snowy picture, distorted sound	• Check the direction, location and connections of your aerial. • This interference often occurs due to the use of an indoor aerial.
Remote control malfunctions	• Replace the remote control batteries. • Clean the upper edge of the remote control (transmission window). • Check that the **+** and **–** ends of the batteries are inserted correctly. • Check that the batteries are drained.
Screen is black and power indicator light blinks steadily	• On your computer check; Power, Signal Cable. • Move the computer's mouse or press any key on the keyboard. • On your equipment check (STB, DVD, etc) ; Power, Signal Cable. • The TV is using its power management system. • Press the Source button on the panel or remote control. • Turn the TV off and on.
The damaged picture appears in the corner of the screen.	• If **Screen Fit** is selected in some external devices, the damaged picture may appear in the corner of the screen. This symptom is caused by external devices, not TV.
The "Resets all settings to the default values" message appears.	• This appears when you press and hold the **EXIT** button for a while. The product settings are reset to the factory defaults.

Specifications

The descriptions and characteristics in this booklet are given for information purposes only and are subject to modification without notice.

Model Name	PS42B450/PS42B451	PS50B450/PS50B451
Screen Size (Diagonal)	42 inch	50 inch
PC Resolution (Optimum)	1024 x 768 @ 60 Hz	1360 x 768 @ 60 Hz
Sound (Output)	10 W x 2	10 W x 2
Dimension (WxHxD)		
Body	1056 x 74 x 660 mm	1221 x 74 x749 mm
With stand	1056 x 316 x 721 mm	1221 x 316 x 810 mm
Weight		
Body	24 kg	31 kg
With stand	28 kg	35 kg
Environmental Considerations		
Operating Temperature	50 °F to 104 °F (10 °C to 40 °C)	
Operating Humidity	10% to 80%, non-condensing	
Storage Temperature	-4 °F to 113 °F (-20 °C to 45 °C)	
Storage Humidity	5% to 95%, non-condensing	

✐ This device is a Class B digital apparatus.

✐ Design and specifications are subject to change without prior notice.

✐ For the power supply and Power Consumption, refer to the label attached to the product.

Warning! Important Safety Instructions

Please read the appropriate section that corresponds to the marking on your Samsung product before attempting to install the product.

CAUTION
RISK OF ELECTRIC SHOCK DO NOT OPEN
CAUTION: TO REDUCE THE RISK OF ELECTRIC SHOCK, DO NOT REMOVE COVER (OR BACK). THERE ARE NO USER SERVICEABLE PARTS INSIDE. REFER ALL SERVICING TO QUALIFIED PERSONNEL.

This symbol indicates that high voltage is present inside. It is dangerous to make any kind of contact with any internal part of this product.

This symbol alerts you that important literature concerning operation and maintenance has been included with this product.

- The slots and openings in the cabinet and in the back or bottom are provided for necessary ventilation. To ensure reliable operation of this apparatus, and to protect it from overheating, these slots and openings must never be blocked or covered.
  - Do not cover the slots and openings with a cloth or other materials.
  - Do not block the slots and openings by placing this apparatus on a bed, sofa, rug or other similar surface.
  - Do not place this apparatus in a confined space, such as a bookcase, or built-in cabinet, unless proper ventilation is provided.
  - Give your product 10 cm (4 inch) clearance from the wall.
- Do not place this apparatus near or over a radiator or heat resistor, or where it is exposed to direct sunlight.
- Do not place heat generating items such as candles, ashtrays, incense, flammable gas or explosive materials near the product.
- Do not place a water containing vessel on this apparatus, as this can result in a risk of fire or electric shock.
- Do not expose this apparatus to rain or place it near water(near a bathtub, washbowl, kitchen sink, or laundry tub, in a wet basement, or near a swimming pool etc.). If this apparatus accidentally gets wet, unplug it and contact an authorized dealer immediately. Make sure to pull out the power cord from the outlet before cleaning.
- This apparatus use batteries. In your community there might be regulations that require you to dispose of these batteries properly under environmental considerations. Please contact your local authorities for disposal or recycling information.
- Do not overload wall outlets, extension cords or adaptors beyond their capacity, since this can result in fire or electric shock.
- Power-supply cords should be routed so that they are not likely to be walked on or pinched by items placed upon or against them, paying particular attention to cords at plug end, adaptors and the point where they exit from the appliance.
- To protect this apparatus from a lightning storm, or when it is left unattended and unused for long periods of time, unplug it from the wall outlet and disconnect the antenna or cable system.
  This will prevent damage to the set due to lightning and power line surges.
- Before connecting the AC power cord to the DC adaptor outlet, make sure the voltage designation of the DC adaptor corresponds to the local electrical supply.
- Never insert anything metallic into the open parts of this apparatus. Doing so many create a danger of electric shock.
- To avoid electric shock, never touch the inside of this apparatus. Only a qualified technician should open this apparatus.
- Make sure to plug the power cord in until it is firmly inserted. When removing the power cord, make sure to hold the power plug when pulling the plug from the outlet. Do not touch the power cord with wet hands.
- If this apparatus does not operate normally - in particular, if there are any unusual sounds or smells coming from it
  - unplug it immediately and contact an authorized dealer or service center.
- Be sure to pull the power plug out of the outlet if the TV is to remain unused or if you are to leave the house for an extended period of time (especially when children, elderly or disabled people will be left alone in the house).
  - Accumulated dust can cause an electric shock, an electric leakage or a fire by causing the power cord to generate sparks and heat or the insulation to deteriorate.
- Be sure to contact an authorized service center, when installing your set in a location with heavy dust, high or low temperatures,high humidity, chemical substances and where it operates for 24 hours such as the airport, the train station etc. Failure to do so may cause serious damage to your set.
- Use only a properly grounded plug and receptacle.
  - An improper ground may cause electric shock or equipment damage. (Class I Equipment only.)
- To disconnect the apparatus from the mains, the plug must be pulled out from the mains socket, therefore the mains plug shall be readily operable.
- Do not allow children to hang onto the product.
- Store the accessories (battery, etc.) in a location safely out of the reach of children.
- Do not install the product in an unstable location such as a shaky self, a slanted floor or a location exposed to vibration.
- Do not drop or impart any shock to the product. If the product is damaged, disconnect the power cord and contact a service center.

WARNING - TO PREVENT THE SPREAD OF FIRE, KEEP CANDLES OR OTHER OPEN FLAMES AWAY FROM THIS PRODUCT AT ALL TIMES.

Wiring the Mains Power Supply Plug (UK Only)

IMPORTANT NOTICE

The mains lead on this equipment is supplied with a moulded plug incorporating a fuse. The value of the fuse is
indicated on the pin face of the plug and, if it requires replacing, a fuse approved to BSI1362 of the same rating must be used.

Never use the plug with the fuse cover omitted if the cover is detachable. If a replacement fuse cover is required, it must be of the
same colour as the pin face of the plug. Replacement covers are available from your dealer.

If the fitted plug is not suitable for the power points in your house or the cable is not long enough to reach a power point, you should
obtain a suitabl y approved extension lead or consult your dealer for assistance. However, if there is no alternative but to cut off the
plug, remove the fuse and then safely dispose of the plug.

Do NOT connect the plug to a mains socket as there is a risk of shock hazard from the bared flexible cord.

IMPORTANT

The wires in the mains lead are coloured in accordance with the following code:
BLUE - NEUTRAL BROWN - LIVE
As these colours may not correspond to the coloured markings identifying the terminals in your plug, proceed as
follows :
The wire coloured BLUE must be connected to the terminal marked with the letter N or coloured BLUE or BLACK.
The wire coloured BROWN must be connected to the terminal marked with the letter L or coloured BROWN or RED.

WARNING:

DO NOT CONNECT EITHER WIRE TO THE EARTH TERMINAL, WHICH IS MARKED WITH THE
LETTER E OR BY THE EARTH SYMBOL   , OR COLOURED GREEN OR GREEN AND YELLOW.

Warranty Card

UNITED KINGDOM

This Samsung product is warranted for a period of twelve (12) months from the original date of purchase, against
defective materials and workmanship. In the event that warranty service is required, you should return the product to the retailer
from whom it was purchased. However, Samsung Authorised Dealers and Authorised Service Centres in other EC Countries will
comply with the warranty on the terms issued to purchasers in the country concerned. In case of difficulty, details of our Authorised
Service Centres are available from:

Samsung Electronics U.K. Ltd.

Customer Care Centre

PO Box 17243

Edinburgh, EH11 4YB

United Kingdom

**Tel: 0870 SAMSUNG (7267864)(UK & Northern Ireland)**

Tel: 0818 717 100 (EIRE Only)

Fax: +44 0845 650 8080

Web : www.samsung.com

WARRANTY CONDITIONS

1. The warranty is only valid if, when warranty service is required, the warranty card is fully and properly completed and is
   presented with the original invoice or sales slip or confirmation, and the serial number on the product has not been defaced.

2. Samsung's obligations are limited to the repair or, at its discretion, replacement of the product or the defective part.

3. Warranty repairs must be carried out by Authorised Samsung Dealers or Authorised Service Centres.
   No re-imbursement will be made for repairs carried out by non Samsung Dealers and, any such repair work and damage to the
   products caused by such repair work will not be covered by this warranty.

4. This product is not considered to be defective in materials nor workmanship by reason that it requires adaptation in order to
   conform to national or local technical or safety standards in force in any Country other than the one for which the product was
   originally designed and manufactured.
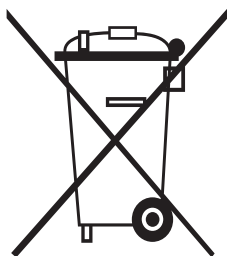
**Correct Disposal of This Product
(Waste Electrical & Electronic Equipment)**

**(Applicable in the European Union and other European countries
with separate collection systems)**

This marking on the product, accessories or literature indicates that
the product and its electronic accessories (e.g. charger, headset,
USB cable) should not be disposed of with other household waste
at the end of their working life. To prevent possible harm to the
environment or human health from uncontrolled waste disposal,
please separate these items from other types of waste and recycle
them responsibly to promote the sustainable reuse of material
resources.

Household users should contact either the retailer where they
purchased this product, or their local government office, for details of
where and how they can take these items for environmentally safe
recycling.

Business users should contact their supplier and check the terms and
conditions of the purchase contract.
This product and its electronic accessories should not be mixed with
other commercial wastes for disposal.